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The Journal of the American
Association of Zoo Keepers, Inc.
JANUARY 2006

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Resources for Crisis Management in Zoos & Other Animal Care Facilities, Vol. 2 - Susan D. Chan, Topeka, KS; William K. Baker, Little Rock Zoo, AR; Diana Guerrero, ArkAnimals, Big Bear Lake, CA

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30th Anniversary
1974 - 2004

About the Cover.....

This month's cover features a Western Lowland Gorilla (Gorilla gorilla gorilla) drawn by Roby Elsner of the Louisville Zoological Gardens, Louisville, KY. The gorilla is the largest of the living primates. Gorillas live in family groups of 2-20 animals, comprised of a single breeding male, 1 or 2 subordinate males, several females and their young. They are diurnal, normally feeding during the morning and afternoon and resting for a few hours around midday. At night they make nests-platforms, or cushions of branches, which keep them off the cold ground. They are basically gentle natured and unaggressive except in defense of their breeding rights and family groups. Their range is in West Africa from Nigeria to Zaire where they inhabit dense primary and secondary tropical forests and lowland swamps. The height of the male averages 5'6" and the weight is 310-400 pounds. The females are smaller, about 5' and 200 pounds. They have a broad chest, muscular neck, and strong hands and feet. Short, thin, grey-black to brown-black hair covers the entire body except the face. A thick ridge of bone juts out above the eye, and the nostrils are flared. Western lowland gorillas have a gestation period of 8-9 months. The offspring are born helpless, and must be carried in the mother's arms. Growing at twice the rate of human babies, gorilla infants are able to crawl and ride the mother's back at three months of age. They continue to ride the mother's back until they are 3.5 to 4 years old. This species is currently listed on the ICUN Red List and in Appendix II of CITES. Thanks, Roby!

Animal Keepers' Forum publishes original papers and news items of interest to the animal keeping profession. Non-members are welcome to submit articles for consideration. Articles should be typed or hand-printed and double-spaced. Authors are encouraged to submit their manuscripts on a disk as well as in hard copy form. Manuscripts submitted either on disk or electronically as attachments to an email should be submitted in Microsoft WORD. All illustrations, graphs, charts and tables should be clearly marked, in final form and should fit in a page size **no greater than** 5.5" x 8.5" (14cm x 22cm). Literature used should be cited in the text (Brown, 1986) and alphabetically in the final bibliography. Avoid footnotes. Include scientific name (as per ISIS) the first time an animal name is used. Thereafter use common name. Use metric system for weights and measurements (standard equivalents may be noted in parenthesis). Use the continental dating system (day-month-year). Times should be listed as per the 24-hour clock (0800, 1630 hrs. etc.). Glossy black and white **or** color prints (minimum size 3" x 5" [8cm x 14cm]) are accepted. Clearly marked captions should accompany photos. Please list photo credit on back of photo. Photographs may be submitted electronically as either JPEG or TIFF file attachments.

Articles sent to *Animal Keepers' Forum* will be reviewed by the editorial staff for publication. Articles of a research or technical nature will be submitted to one or more of the zoo professionals who serve as referees for *AKF*. No commitment is made to the author, but an effort will be made to publish articles as soon as possible. Lengthy articles may be separated into monthly installments at the discretion of the editor. The editor reserves the right to edit material without consultation unless approval is requested in writing by the author. Materials submitted will not be returned unless accompanied by a stamped, self-addressed, appropriately-sized envelope. Telephone, fax or email contributions of late-breaking news or last-minute insertions are accepted as space allows. Phone 1-800-242-4519 (US); 1-800-468-1966 (Canada); FAX (785) 273-1980; email is akfeditor@zk.kscoxmail.com<

Deadline for each regular issue is the 10th of the preceding month.
Dedicated issues may have separate deadline dates and will be noted by the editor.

Articles printed do not necessarily reflect the opinions of the *AKF* staff or the American Association of Zoo Keepers, Inc. Publication does not indicate endorsement by the Association.

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E-Mail Addresses: You may reach Barbara Manspeaker at AAZK Administrative Offices at: aazkoffice@zk.kscoxmail.com< You may reach Susan Chan and *Animal Keepers' Forum* at: akfeditor@zk.kscoxmail.com<

AAZK website Address: www.aazk.org

BFR Website: http://aazkbfr.org

Scoops & Scuttlebutt

Chapter E-Newsletter to Make Debut This Month

As a means of staying in touch with our AAZK Chapters and keeping all Chapter members up-to-date on what is happening within the Association, AAZK will launch an E-Newsletter this month. This newsletter will be sent to the email address listed on each Chapter's most recent recharter form. These newsletters will include conference updates, BFR news, professional development opportunities, grant application information along with a monthly financial statement for the Association and other items of interest. Chapter Presidents are strongly encouraged to make copies of the newsletter to post or distribute to their Chapter members, or forward the information along electronically to Chapter members' email addresses. Staying connected helps us all better understand how AAZK works, what it has to offer you as a member, and how Chapters can participate in the Association's projects and programs. Watch for the first edition this month.

Recharter Packets in the Mail - Due at AO by March 1st

All AAZK Chapters are reminded that 2006 Recharter Packets have been sent to each Chapter President at the address listed on last year's recharter form. Completed packets are due back at the AAZK Administrative Office no later than ***1 March 2006***. The late fee for 2006 is $150.00, so you are encouraged to make every effort to get your packets in by deadline. Be sure to fill out the packets completely, providing all of the requested information, including a copy of your 2005 closing bank statement. Completion of the recharter packets by all AAZK Chapters is an IRS requirement to allow AAZK, Inc. and its subsidiaries to operate under our nonprofit 501(c)(3) designation. If you have questions about filling out the packet, please contact Barbara Manspeaker at 1-800-242-4519 (U.S. or 1-800-468-1966 (Canada). Your cooperation and prompt response is greatly appreciated!

Have You Sent AO Your E-mail Address Yet?

In order to better communicate with our members, and also save the Association the rising costs of mailings/postage, we are working to establish an AAZK member e-mail database. With such a database we would be able to send out electronic membership renewal notices, information about upcoming conferences, and other Association news. In order to make this work, we need your help. Please send an e-mail to Barbara Manspeaker at aazkoffice@zk.kscoxmail.com with the words "AAZK Email Database" in the subject line. Please be assured that your e-mail address will not be shared with any other group or individual without your express permission. We are simply looking for ways to stay in touch with you as a member and to also help cut the costs of mailings and postage for the organization. Thanks in advance for helping us achieve this cost-cutting goal.

Blue Rhino®/Bowling For Rhinos Set New Goals

Blue Rhino® Gas Company has pledged to **sponsor Bowling For Rhinos for $20,000/year for another two years**! Blue Rhino® is an extremely conservation-oriented company. Not only do they keep hundreds of thousands of gas tanks out of landfills each year by having a tank exchange program, but they also want to help "Bowling For Rhinos" reach an new fundraising goal. Within five years we hope to be raising $500,000/year through Bowling For Rhinos!

I'd like to encourage every AAZK Chapter to participate in Bowling For Rhinos each year. If your Chapter has never held an event, please see www.aazkbfr.org under "How to hold an event" for important tips. Blue Rhino® would also like to have more employees become involved with your events. Please contact Chris Hartley at: chartley@bluerhino.com or Mark Romanik at: mromanik@bluerhino.com to get contact info for Blue Rhino IN YOUR AREA & invite them to your event. Point Defiance Chapter had 35 Blue Rhino® employees bring in an extra $3,000 to their event! Also, if you did not receive a Blue Rhino® Banner last year, please request one from Chris and display it if you can.

So next time you discover you are out of gas when you go

to use your gas grill, remember to use the one that benefits conservation: Blue Rhino®. Help spread the word and you will be helping conservation - every bit helps!

To increase publicity and media coverage it was suggested we hold our events during a shorter time frame. I'd like to encourage any Chapter that is able to hold their event during the month of May- preferably the first Saturday of May. I realize this is not possible for some Chapters, but it would be great for those that can.

Please feel free to contact me with questions or concern at: Patty Pearthree, AAZK's BFR National Coordinator, Ppear3@pear3.org; phone - 919-678-0449; 318 Montibello Dr., Cary, NC 27513.

Deadline is 30 January 2006 for ICZ New Logo Contest

The International Congress of Zookeepers (ICZ) is seeking a new logo. This logo will be used on all ICZ related items such as letterhead, T-shirts and conference satchels, as well as the website and all future merchandise marketed by the ICZ.

To submit a logo for consideration, please follow these guidelines:
- must incorporate the letters "ICZ" in the design
- should be easily reproducible
- should represent zookeeping on a global level
- preferably limit to 2 colors; if you choose to include color send both a color and a black and white version

If you would like to have your design considered as the new logo, please send a **high resolution** .jpg file to: Norah.Farnham@zoo.org Or you may send a hard copy to: Norah Farnham, c/o Woodland Park Zoo, 601 N. 59th St., Seattle WA 98103 USA.

Entries are due by 30 January 2006. The five (5) finalists, selected by the ICZ Steering Committee, will be notified by 1 April 2006 that their design is to appear on the 'ballot' at the congress in Australia. At the second International Congress, which will be held May 7-11, 2006 in Gold Coast, Queensland, Australia, the delegates in attendance will be given the opportunity to cast their votes and choose the winning logo. The winning logo will be chosen and announced at that time.

To learn more about the ICZ, please visit our website at www.iczoo.org

Marketing Committee Seeks Members

Would you like to help AAZK on a National level? The Marketing Committee is looking for additional committee members. Some of our projects for the next year include:

- Product line developement
- Sponsorship/ Donation Program
- Partnerships with other organizations
- Membership Drives
- Membership Retention Program

Please contact Kristen Wolfe at kristen.wolfe@disney.com if you are interested. Include a brief reason for interest and your past AAZK involvement

Website for 2006 AAZK Conference Now Online

AAZK will be heading to Chicago in the fall of 2006 for its National Conference. It is being hosted by the Lincoln Park AAZK Chapter and the Lincoln Park Zoo. They now have a website up and will be adding information on the upcoming conference as it becomes available. The website address is www.aazk2006.org< There is also a link to this site from the main AAZK website (www.aazk.org).

FROM THE EDITOR: *A big Thank You to AKF Associate Editor Kayla Grams for putting together the index for the 2005 issues of the Forum. It is printed in the back of this month's issue. Also, welcome to Jolene Hamrick, new Associate Editor for AKF who will be coordinating the "People Skills for Animal People" column. - Susan Chan, AKF Managing Editor*

From the President

Two thousand-five is over and it was a tough year. This was the year that Hurricane Katrina stopped a national conference and also impacted many of our members. It also greatly impacted this Association financially. You may not know it, but a good portion of the Association's operating budget comes from money made at the annual conference. Obviously we did not receive much money from the conference this year. Some of you did graciously donate your registration fees to the Association or to our hurricane relief fund, and for that we THANK YOU.

Because of this crisis the Board of Directors has taken a long hard look at how we do business and we **must** change the way we operate. We are a non-profit association, but it does take money to fund our objectives such as merchandise, grants, etc. We cannot continue to operate the way we have in the past. To that end, the BOD will be making a concerted effort to increase our ability to communicate with you, the member, and we will do that through our local AAZK Chapters. We will be sending your local Chapter a monthly e-newsletter that will give you a better idea of the state of the Association. This newsletter will also give you an opportunity to see how your local Chapters can help the Association as a whole reach its objectives.

We will be calling on the local Chapters to partner with us in many endeavors. There will be more information regarding what these partnerships will be in the e-newsletter mentioned in the Scoops & Scuttlebutt column. This is simply too short a space to go into it completely. If, by the end of the month, you have not seen or been given information from this newsletter make sure you ask your local board for that information. They are being tasked with disseminating it to you. It is critical that the local Chapters take a stake in the Association as a whole. The local Chapters are the backbone of this Association and are essential to its success. We, the Board of Directors, know the local Chapters will step up and help us succeed. Take care and be safe.

Denise C. Wagner
President, AAZK Inc.

Coming Events

Third International Tapir Symposium - 26-31 January 2006 in Buenos Aires, Argentina. For info email tapirtalk@uol.com.br<

14th Annual Conference of The International Association of Avian Trainers and Educators (IAATE) - 15-18 February 2006 in Nashville, TN. This year's theme is "Soaring to New Heights". The conference is being hosted by the Nashville Zoo at Grassmere, at the Nashville Sheraton Downtown Hotel. For further information, please visit www.iaate.org . You can also contact Alicia Douglas (aliciadouglas78@yahoo.com) or Jacqueline Walker (jwalker@nashvillezoo.org).

Animal Behavior Management Alliance Conference - 5-10 March, 2006 in San Diego, CA. Hosted by the Zoological Society of San Diego and Sea World/California. The theme is "Behavioral Buffet" and conference will include site visits, workshops, paper and poster presentations and a job fair. For more info on the ABMA and the conference log on to www.theabma.org<

AZA Eastern Regional Conference - 26 March - 1 April 2006 - hosted by the Jacksonville Zoo, Jacksonville, FL. See http://www.aza.org/ConfWork/AboutRegWork/#fut

Techniques for Butterfly Conservation and Management - 24-26 April, 2006 in Gainesville, FL. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

AZA Western Regional Conference - 24-29 April 2006 - hosted by Vancourver Aquarium in Vancouver, British Columbia. See http://www.aza.org/ConfWork/AboutRegWork/#fut

Second International Congress of Zookeeping (ICZ) 7-11 May 2006 in Gold Coast, Queensland, Australia. Visit website: http://www.iczoo.org< for latest information or send a blank e-mail to ICZ_News-subscribe@yahoogroups.com for regular updates on this event or contact Liz Romer at slromer@bigpond.com

Tenth Elephant Ultrasound and Veterinary Procedures Workshop - 17-20 May, 2006 at Riddle's Elephant and Wildlife Sanctuary, Greenbriar, AR.For more information, or a registration packet, please contact Dr. Schmitt, 217 Karls Hall, SMSU - AG. Dept., 901 South National Ave., Springfield, MO 65804 USA; phone (417) 836-5091; fax (417) 836-6979; email - dennisschmitt@missouristate.edu; or contact Riddle's Elephant and Wildlife Sanctuary, PO Box 715, Greenbrier, AR 72058 USA; phone (501) 589-3291; fax (501) 589-2248; email - www.elephantsanctuary.org<

2006 International Gorilla Workshop - 23-26 June 2006 at Paignton Zoo, Devon, England. Paignton Zoo will be host. We would like to invite gorilla workers from all diciplines to register. Further information available at http://www.paigntonzoo.org.uk/gorillas/gorillaworkshop.htm

21st Congress of the International Primatological Society - 26-30 June 2006 in Entebbe, Uganda. For further info: wolupot@yahoo.com

First European Congress of Conservation Biology - 23-27 August 2006. Plerase visit http://www.eccb2006.org for details and to register for new information.

33rd AAZK National Conference – 15-20 September 2006. Hosted by the Lincoln Park Zoo AAZK Chapter and the Lincoln Park Zoo, Chicago, IL. See information at their website www.aazk2006.org≤

Animal Training Seminar - 18-22 September, 2006 at Shedd Aquarium, Chicago, IL. Five-day seminar on training techniques with Ken Ramirez. For more info and questions, contact Renee Birk at rbirk@sheddaquarium.org or call (312) 692-3328. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

AZA Annual Conference - 25 - 30 September 2006. Hosted by Busch Gardens, Florida Aquarium, & Lowry Park Zoo, Tampa, FL. See information at their website http://www.aza.org/ConfWork/AboutAnnualConf/#fut

Managing Animal Enrichment and Training - 7-13 October, 2006 in Portland, OR. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

Post Your Coming Events Here - email to:

akfeditor@zk.kscoxmail.com

AAZK Announces New Members

Gwendolyn Cooper, **Smithsonian's National Zoological Park (DC)**; Charles C. Miller, **Busch Gardens (FL)**; Jamie M. Barnard, **Disney's Animal Kingdom (FL)**; Jay Barry, **Shell Factory Nature Center (FL)**; Lindsay Garrett, Elizabeth B. Dyer and Dawn Rouse, **Nashville Zoo at Grassmere (TN)**; Julie Mavis, **Ft. Wayne Children's Zoo (IN)**; Ann Fleischman, **The Alexandria Zoo (LA)**; Elena Allensworth, **no zoo listed (Albuquerque, NM)**; Dustin Black, **San Diego Zoo (CA)**; Karen Oglesby, **no zoo listed (La Quinta, CA)**; Kristen Boeche and Kevin Hosford, **Santa Barbara Zoo (CA)**; Jessica Franck, **Sacramento Zoo (CA)**; and Shelley Turner, **no zoo listed (Loretto, Ont., Canada)**.

Renewing Contributing Members

Mark Hofling, Senior Keeper
Bronx Zoo (NYZS), Bronx, NY

Renewing Institutional Members

Santa Fe Community College Teaching Zoo
Gainesville, FL
Jack Brown, Director

Michigan State University Library
Lansing, MI

J. Otto Lottes Health Sciences Library
University of Missouri, Columbia, MO

Rainforest & Aquarium at Moody Gardens
Galveston, TX
Mike Riley, President

Chimps, Inc.
Bend,OR
Lesley Day,Owner

Sumatran Rhinos Believed Poached

The last five endangered Sumatran rhinos (*Dicerorhinus sumatrensis*) living in a southern Malaysian forest reserve park are believed to have been killed by poachers, a conservationist announced in early December.

Vincent Chow, an adviser to the Malaysian Nature Society, said indigenous people who live on the fringes of the Endau Rompin National Park in Johor state and regularly roam the area have failed to find any sign of the animals.

If they are indeed dead, it could be a fatal blow to the dwindling population of the Sumatran Rhinoceros in Malaysia. Besides Johor, another 80 to 100 rhinos are believed to exist in the wild in other national parks in the country, according to official estimates. Conservationists say the number might be smaller.

Source: ZooNews Digest #378 11-30-05

People Skills for Animal People

By Jolene Hamrick
AKF Associate Editor

Getting the Most from Your Performance Evaluations

One of AAZK's organizational goals is to support animal keepers in their professional goals. In addition to providing resources for your animal husbandry, training, and enrichment needs, we felt it would be useful to supply you with the tools necessary to conduct business. "Conduct business?" you ask. For those of you who consider yourselves more animal-people than people-people, it may be a hard sell to convince you that you still need "soft skills" to be successful in the animal profession. But let me ask you this: Do you ever have to negotiate with management on an issue that is important to you? Do you have a troubled relationship with a co-worker or supervisor? Do you feel that management doesn't listen? Do you work on a team that doesn't function as well as it could? Do you ever attend meetings, be it with management, team members or with other AAZK Chapter members, that are disorganized, frustrating, and don't seem to get much accomplished? Are you aspiring to one day become a part of middle or upper management? These are just a few of the ways that sharpening your so called "soft skills" can make your job go much more smoothly and give you extra time to focus on things that are important to you.

We're going to kick off this column with some ideas on how to assert more control over your performance evaluation. If you come away from your performance evaluation feeling like you didn't get much out of it, have been evaluated unfairly, or your supervisor is just unaware of the accomplishments that you have achieved, this issue should provide you with some helpful suggestions that you can get started on immediately!

The best piece of advice I can give you is Document, Document, Document!

Creating your own file of big and small accomplishments. Your supervisor isn't going to be around to see all of the important things you do, and chances are with all the other people they are supervising, some of your accomplishments will be forgotten. Then, there's the likelihood that the things that they do remember will be negative. Now is no time to be modest; you need to create a file documenting all of the noteworthy things that you do to help your supervisor remember during that crucial hour. Below are just a few examples of things that you might include in your file:

- New skills you've learned
- Ways you have improved processes
- Training you have done with new interns or new keepers
- Ways you have improved upon or increased interactions with the public
- Professional development classes you have taken (Be sure to include actual copies of any certificates you are awarded)
- Ways you have been a team player (incidents when you spent a significant portion of your day helping out another keeper -- especially if they are from another area)
- Projects or programs that you have developed or helped to develop
- Committees in which you have participated

- Research you have completed
- Papers you've submitted for publishing or presented at a conference
- Any new behaviors you have trained;(pictures are worth a thousand words!)
- Pictures of a new enrichment item that you developed or researched, or even better, the animal playing with the enrichment item.
- Reports from the studbook that you manage, if you are a studbook keeper
- Ways you've improved safety in your organization; include your own safety record.

Keep your file ongoing and up to date; this ensures that you don't forget anything. If it hadn't occurred to you yet, a lot of this should also be going on your resumé. You never know when having a current resumé on hand will come in handy! Don't just document what you've done; take some time to translate it into terms of how you've affected the organization as a whole. We sometimes get frustrated in management's undying focus on the bottom line; use this to your advantage! If you can show management how you've saved the organization money, they are likely to be a little more attentive and, not to mention, grateful. Remember, money saving (or earning) potential can be hiding in all sorts of places including process improvements, improved visitor experiences, and organizational safety.

Next, you will want to create some goals for yourself. When creating your goals, you will want to make sure that your goals are specific, measurable, achievable, and time-sensitive. I know this sounds like a lot of work, but essentially you are creating criteria for future evaluations that are objective. And actually, you probably do a lot of daily goal setting anyway – those helpful "to-do lists" that you make for yourself. All you need to do is tweak the process a little. So for those of you who sometimes run into trouble with your supervisor, and your perception and their perception of your work are in definite conflict, this should significantly help keep subjectivity out of the process.

Here is a comparison of both general goals as well as ones that are specific, measurable, and time-sensitive. The x, y, and z are elements that you must set so they are achievable.

General	**Specific**
Improve the shift time of this animal.	Improve the shift time of this animal from time x to time y by date z.
Decrease the stereotypical behavior of this animal	Decrease the time spent pacing in the afternoon from time x to time y by date z.
Increase the number of animals on exhibit by the time the zoo opens	Have x out of y number of animals on exhibit by opening z% of the time.
Learn how to shoot/become part of the shooting team.	Learn to shoot with an accuracy of x percent by date z.

During Your Evaluation. When it comes time for your evaluation, don't be afraid to assert some control over the process, especially if there is no apparent process. The evaluation is meant to help you improve your performance as an employee and to serve as a tool for your professional development. First things first - check your baggage at the door. In order for this process to be successful you have to keep an open mind and leave what happened at last year's evaluation where it belongs, in the past. Hopefully, your supervisor will do the same. If s/he starts to bring things up from the past, you can remind him or her that you'd like this to be a fresh start. Reality, however, is that you can only control your attitude and what you're willing to bring to the table.

When discussing your goals with your supervisor (both the ones you and s/he have prepared) write them down as you agree upon them. Agree on a way in which your supervisor will verify if the goals are met. Agree on the ground rules on how to go about revising a goal, if down the road you find that perhaps it isn't as achievable as originally thought. Let's face it, goals and circumstances are subject to change. Get agreement from your supervisor that if s/he feels that you are in some way falling short of your goal planning session that s/he will come talk to you about it, rather than waiting and bringing up surprises during your appraisal. Finally, if any of your goals require any commitment from your supervisor make sure this is addressed as well.

Once you have agreed upon these things, don't forget to document! Let your supervisor know that you would like to type up the list and return it to him/her so that you can both sign as acknowledgement that you have agreed upon these items. Request that the document be put in your employee jacket and used as part of next year's evaluation tool. As memories have a tendency to change, this ensures that you will both have something concrete to which you can refer back.

Remember, if you are prepared for your evaluation it will go much more smoothly and your supervisor is likely to have greater respect for you. If you have aspirations of climbing the ladder to lead keeper or even management, this will show them that you know how to set goals and accept responsibility for your own professional development and achievements.

Next month: *Understanding and appreciating the value in different personality type/work styles*

(About the author: Jolene Hamrick is a former Zoo Keeper and has a Master's degree in Organizational Management.)

Registrations for the 2nd International Congress on Zookeeping 7-11 May2006 on the Gold Coast Australia Have Now Opened!

Thanks to some very supportive sponsors registration costs for early bird full registration are $450 Australian dollars. Based on today's exchange rates this works out approximately $US338 or Euro 279. Accommodation is additional to this and we have secured a good rate at the conference hotel - the Gold Coast International. Triple share for 4 nights works out at $280 Australian dollars or approximately $US210 or Euro 174 which includesbreakfast.

The full conference registration will cover all events which include icebreaker Sunday night, Dreamworld dinner Monday night, breakfast at Currumbin Sanctuary Tuesday morning, BBque dinner Tuesday night and the conference dinner at Seaworld Wednesday night. All functions include food and some drinks. Morning, afternoon tea & lunch will be supplied each day Monday to Thursday.

Accommodation is limited so it important that people register early for the conference. The early bird conference rate finishes **28 February 2006** after which full registrations rise to $AUD550.

We are offering a number of pre and post conference tours which include to Australia Zoo, Koala habitat field work, North Queensland, Fraser Island and O'Reilley's Rainforest Retreat. All information on these tours is available in the conference registration information on the ICZ website.

Registration information, registration forms and accommodation booking forms are all available on the ICZ website - www.iczoo.org <http://www.iczoo.org/>

If you require any further information feel free to email me. Looking forward to seeing you there!

Liz Romer
ICZ Conference Convener Email: slromer@bigpond.com

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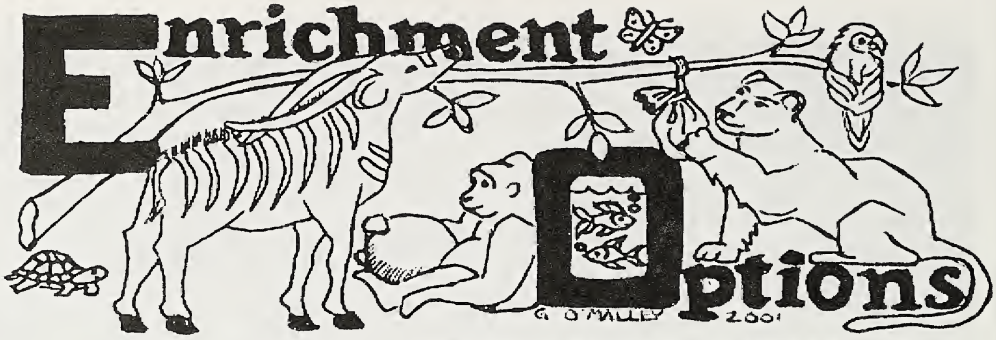


EO Editors - Dawn Neptune, Utah's Hogle Zoo
and Rachel Daneault, Disney's Animal Kingdom

From the Editors: As we start another exciting year, Enrichment Options would like to begin with a wonderful three-part series focusing on the most important element of a successful enrichment program - involvement! The following three installments will highlight some creative ideas to increase enthusiasm and engage not only our animals but our staff, volunteers and visitors as well. We hope that this series inspires your own 2006 resolutions to promote enrichment at every level within your own facility. Have fun and have a very enriching New Year!

Community Involvement in Behavioral Enrichment at the Phoenix Zoo.

By Hilda Tresz
Behavioral Management Coordinator
Phoenix Zoo, Phoenix, AZ

In 2003, the Phoenix Zoo developed its proactive, structured, and documented Behavioral Management Protocol. The comprehensive management protocol outlines the philosophy and standards for a general behavioral enrichment protocol for all species, and a specific primate behavioral enrichment program. The primate enrichment protocol presents captive husbandry guidelines for the care and psychological well-being of nonhuman primate species at the Phoenix Zoo. These guidelines have been developed in accordance with the USDA Animal Welfare Act (Environmental Enrichment for Nonhuman Primates Resource Guide January 1992-February 1999; Final Report on Environmental Enhancement to Promote the Psychological Well-being of Nonhuman Primates July 15, 1999 and the AZA Zoo Standards for the Housing of Nonhuman Primates [unpublished report]).

The Management of the Phoenix Zoo maximally promotes behavioral enrichment by providing a successful, goal-oriented, self-sustained program that integrates into the daily management of the animals. This is accomplished by:

• Supplying staff with the information and materials to help with their work (Behavioral Management Coordinator; Training and Enrichment Resource Office).

• Finding adequate incentives to motivate staff: fully incorporating behavioral enrichment into the keeper's job description. Participation in the enrichment plan is closely related to one's personal evaluation.

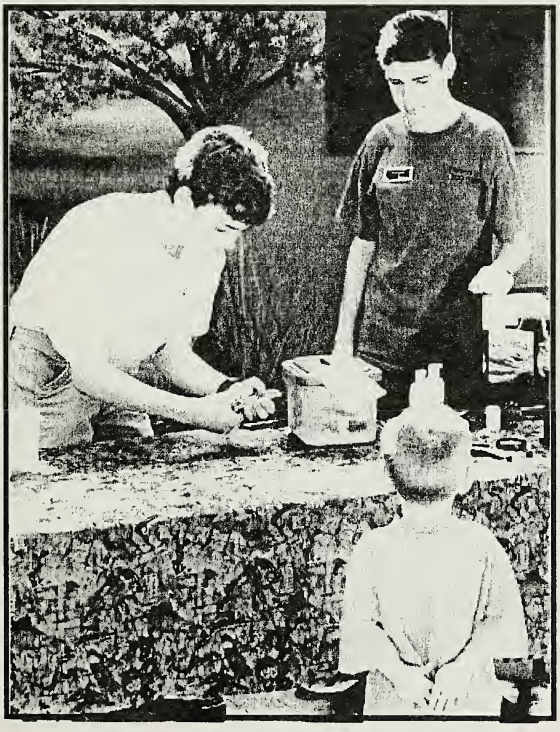
• Individual involvement in the behavioral enrichment program that expands the diversity of responsibilities provides more daily stimulation and therefore, creates more opportunity for professional growth. This in turn allows staff to feel as though they are contributing more to the overall goal or mission of the Phoenix Zoo.

• Recognizing and rewarding the extra efforts (Personal Evaluation, Excellence Reward System).

The Behavioral Enrichment Committee is actively involved in supporting and implementing programs. Benefiting from a variety of small, but institutionally-approved, fundraising options, the committee allocates financial resources in support of small and medium-sized projects Keepers submit a written proposal to the committee specifying their proposed behavioral project considering the animal's natural history, individual history, behavioral architecture, specified behavioral goals and budget. The committee has the authority to support projects that otherwise might not receive attention in the larger budgeting process.

We also have developed a new position called the Behavioral Management Coordinator, to advise staff in training and enrichment planning and problems. We have a Training and Enrichment Resource Office with available publications and videotapes in training and enrichment and an Enrichment Library to provide enrichment items for daily use.

Environmental enrichment is a tool that can be used to improve the animal's psychological and physical well-being. Encouraging natural behavior is just as important when maintaining the animal's everyday life, as when we rescue them from their destroyed habitats. Captive animals have a small chance of survival when they are released and reintroduced to the wild unless they have kept their natural behaviors, such as ability to mate, to rear young, to hunt or forage, escape predators or have fear of man. If the animals maintain natural behaviors in captivity, they will be valuable for education and research programs, welcoming our visitors and volunteers to become involved in individual and group activities.



Trail Teens at the Phoenix Zoo are educating visitors about wildlife.

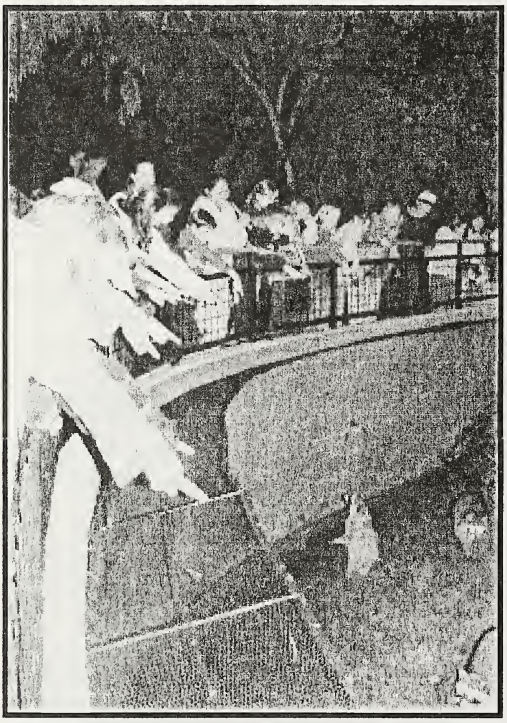
(Photo by Dan Miller)

Exhibition, conservation, animal rescue, captive breeding, rehabilitation, reintroduction and public involvement are components that require managing animal behavior through environmental enrichment.

How do the Phoenix Zoo's enrichment programs for animals affect the guest's interest in the animals or exhibits?

When animals maintain a wide range of species appropriate behaviors in captivity they significantly enhance the guest's experiences and their perception of the zoo, and are more capable of supporting:

1. Engaging experiences for the public:
    - Interactive exhibits that create stimulating environment for both animals and guests
    - Behind the scene tours for the general public are focusing on introducing our behavioral management programs to guest and by doing so creating a special bond and interest of caring about them. Some animals were adopted through our SPOTZ (Special Parents of the Zoo) animal sponsorship program after guest participated in our tours.
    - VIP tours for donors, the Phoenix Zoo Guardian and Antler Members tours organized by the Development Department and/or by keepers include a private behavioral enrichment activity with the animals and a personal keeper talk. Admission to such events was a donation to purchase several enrichment items.
    - Cool B.E. day, known as Winter in July, draws large number of visitors to the zoo in the hottest time of the year.
    - Various holiday enrichment days such as Cinco de Mayo, Halloween and Christmas brings a lot of visitors to our zoo to watch keepers giving behavioral enrichment (piÒatas, pumpkins and pine trees) to their animals.
    - Lots of enrichment items are donated by our members. The members are informed of what items we need through the enrichment wish list published in our in house Wild Times magazine. Also members when they renew their membership can choose to donate money to our behavioral enrichment fund. Our members are greatly involved in our enrichment programs.
    - Night Camp provides animal encounter programs, where kids have the opportunities to feed and to give special enrichment presents to our animals.

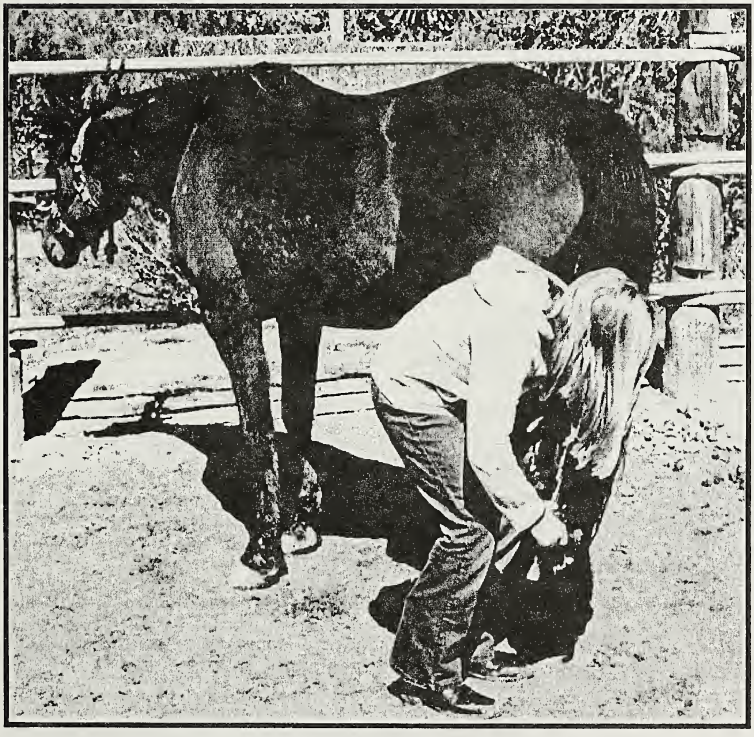


Night Camp kids have the opportunity to provide behavioral enrichment to the animals.

(Photo by Liesl Pimentel)

- Outrageous Otter Breakfast is another program offering behavioral enrichment items to our otters.
- Wallaby Breakfast where children offer browse to wallabies
- Tortoise Breakfast where children feed carrots to Galapagos and Aldabra tortoises
- In our Birthday parties the birthday kids and there friends make special behavioral enrichment presents for certain animals of their choice.
- Farm Food and Play classes for preschoolers allow children to participate in making an enrichment item relating to the days food theme and end their class by giving it to a variety of animals including, cows, porcupines, ocelots, siamangs and wallabies.

2. Providing a resource for animal behavior classes :
   - Critter Care and Horse Hands are programs that focus on care giving for house hold animals such as horses, rabbits, chickens, goats, etc. However these classes also explore basic animal behaviors and how to enrich them. In Critter Care, children participate in creating behavioral enrichment items and distributing them to animals on Harmony Farm.
   - Behavioral Enrichment for Pets is specialized on teaching the general public recognizing basic animals' behaviors and how to care for their pets' mental health in their home.



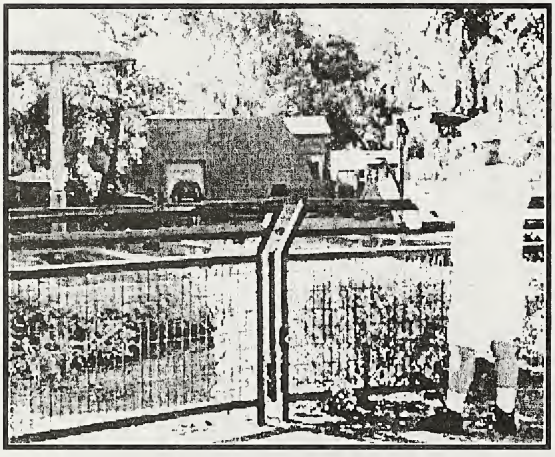
HorseHands class focuses on providing care for household animals. *(Photo by Melanie Nelson)*

Author Hilda Tresz and Program Instructor Melanie Nelson teaching Rabbit Enrichment class.

(Photo by Liesl Pimentel)

3. Research programs such as the elephant foraging and social studies are usually done outside in front of the guest, drawing their attention to difficulties we encounter and how we are planning to resolve them. In the case of our elephant behavior modification program we are continuously explaining the process to our guests and the are able to show the great effects of the implemented behavioral enrichment on the elephant's lives.

4. The Phoenix Zoo's website contains a section on behavioral enrichment that reaches out to a wider population. Through this webpage guests have the opportunity to ask questions form the behavioral management coordinator regarding pet enrichment.



Volunteer Wess Press conducts behavioral observations at the Phoenix Zoo.

(Photo by Hilda Tresz)

Ideas appearing in this column have not necessarily been tested by the editors for safety considerations. Always think ahead and use good judgement when trying new ideas. You are invited to submit material for the Enrichment Options Column. Look in the January 2004 issue of AKF for guidelines for articles acceptable for this column's format or contact the editor at akfeditor@zk.kscoxmail.com for a copy of the guidelines. Drawings and photos of enrichment are encouraged. Send to: AKF/Enrichment, 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054, USA. Eds.)

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REACTIONS

A Question and Answer Forum for the Zoo Professional on Crisis Management

By William K. Baker, Jr., Curator
Panthera Research, Maumelle, AR

Question
We are refining our dive operations policy do you have any suggestions?

Comments
Dive safety is an issue that can never be taken lightly. Simply put, the probability that an accident can occur during a dive is inherently high due to the nature of the activity. This is not to say that diving is an unsafe activity, thousands of people safely dive every day worldwide. Still, the potential for problems is there - especially when it becomes part of the job description. The key to effective dive safety is to make the safety procedures part of the daily routine. In other words, it becomes part of your "system".

Pre-Dive Procedures

- Physical fitness in diving should not be underestimated. If you are not in good condition, how can you as the diver withstand the physical rigors of the dive or manage air consumption? A weekly fitness program should emphasize cardiovascular activity.
- Appraisal of dive conditions is applicable to not only open water dives, but to closed environment tank dives as well. For example, if the specimens have been unusually aggressive lately, has the cause been identified and the situation addressed before going in the tank?
- Pre-dive equipment checks should be a mandatory part of the dive procedure. Throwing on your gear and jumping in the water is the mark of an amateur, not a seasoned diver. Inspect and test your equipment, then your partner's, before hitting the water. Posted graphics should help as a working checklist for reference.
- The "buddy system" should be used at all times. If diving a tank alone, then post someone at the viewing glass or entry point. Solo dives are risky and should only be attempted by advanced divers who have been trained for that type of activity.
- Current research indicates the presence of previously unknown micro-bubbles of gas in the body. Safety stops should be implemented whenever possible in the dive profile to provide an additional margin of safety against DCS.
- Always remember to ascend slower than your bubbles. Most DCS incidents occur in shallow water due to rapid changes in pressure. Posted graphics should include this for ready reference.

Post-Dive Procedures

- Shallow water dives should always be counted in the repetitive profile. "Bubble time" is the same whether it's at depth or not. Continuous shallow water dives still put a diver closer to the DC limits. This is especially easy to forget when performing tank dives. In short, you are underwater, breathing under pressure, and the time in reference to the depth should be counted and logged. Check your tables and watch your computer.
- Always log every dive. If an accident occurs, emergency responders will need to reference your profile. Is this your fifth dive in three days or fifteenth? How saturated are you?

- Equipment should be inspected and maintenance performed immediately following the dive while breaking your gear down.
- Equipment should be repaired immediately if a problem is discovered. It's easy to forget the small problems such as o-rings or gaskets, until it's too late.
- Always allow sufficient time to out-gas after reaching your limit on your dive profiles. Dive computers are great for this task.
- Remember to communicate all problems both verbally to the staff and in writing on the daily report. Communication is the key!

Equipment Maintenance Procedures

- It sounds basic, but always perform a daily check your mask, snorkel, fins, boots, and weight belt for stress tears that can complicate a dive. Also, keep spare parts on hand such as snorkel keepers and mask bands. It's easier than having to cancel the dive and run to the store.
- Inspect regulators, valves, hoses, and BCD's. Pay special attention to gaskets that tend to tear. O-rings should be treated with silicone and wiped clean or replaced. Inspect on a weekly basis.
- Tanks and Spare Air™ units should receive a VIP and hydrostat testing on an annual basis. Valve o-rings should be checked daily. Tank boots, carrying handles, and such are helpful.
- DCS and first aid equipment should be inspected on a weekly basis. Examples would include O_2 units, trauma and rescue kits, and basic dive first aid kits. Constant repair- and restocking is a must and it also tracks usage of materials by the staff.
- Dive lights, underwater tool kits, and welding torches should be inspected and serviced on a weekly basis.
- Compressors should be serviced on an annual basis to insure that CO_2 levels remain low, trace gases remain in line, and that oils and solvents are not being vaporized and dispensed with the air.

Training and Safety Procedures

- Continuing education is available from PADI, NAUI, and SSI. This should be made available to all staff and factored into the budget. Advanced divers are typically more conservative.
- Refresher courses should be held on an annual basis on-site.
- Support Divers Alert Network (DAN). They make diving safer for all of us and are leaders in dive safety research. Their oxygen course is not only useful, but also imperative for emergencies.
- Make advance arrangements with your local emergency room for not only DCS treatment, but venomous bites and stings as well.
- Consider adding an EMT with a dive background to the staff

Next Month: Do you have any recommendations for winter operations at a zoo?

If you would like to submit a question for this column or have comments on previously published materials, please send them to AAZK, Inc., 3601 S.W. 29th St., Suite 133, Topeka, KS 66614 Attn: Reactions/AKF

(About the Author: Since 1985 Bill has been active in the fields of science, zoology, and wildlife management. His education and experience include a B.S. in wildlife management and post-graduate studies in zoology, Lab and Museum Assistant, Shoot Team Leader, ERT Member, Large Mammal Keeper, Senior Keeper, and Zoo Curator at various zoological facilities. His area of research is crisis management in zoological institutions, which draws upon practical experience and training as a Rescue Diver, Hunter Safety Instructor, NRA Firearms Instructor, and Red Cross CPR/First Aid Instructor.)

Semen Collection on Rockhopper Penguins at the Indianapolis Zoo

By
Tammy Root and Jenny Waldoch, DVM
Contributors: Karen Imboden, Orville VanDame, Jeanette Floss, DVM

Why we began collecting?

The Indianapolis Zoo's Rockhopper penguin (*Eudyptes crestatus*) population is aged and is not self-sustaining, which will lead to an empty exhibit within a few years. New captive animals are difficult to acquire and expensive because of the same lack of reproduction at other zoos. Wild collection of eggs is prohibitive due to declining populations, government import and quarantine regulations, and expense and time commitment of reaching remote breeding sites.

Because of the above position statement, we wanted to see if we could increase the number of eggs laid by artificially inseminating birds. The first logical step to begin the process is collecting viable semen. We also wanted to assure ourselves that our males were producing.

How did I train rockhopper penguins for collection?

Since this has never been done before on Rockhopper penguins, I had to gather my technique information from poultry. Not only was I able to find several pieces of information on the web, but I was also able to visit the poultry unit at Purdue University, West Lafayette, Indiana and practice semen collections on their poultry flock.

In order to start the training, I had to consider a couple of factors about the birds. For starters, I only trained the birds that were owned by Indianapolis Zoo. This allowed me to train 6.0.0, one of which was born in 1999 and the others were born in 1987. I also had to take in account that none of these birds were handled on a regular basis. Unless a medical issue appeared, the only time these birds were handled was once every three weeks for routine weighing. (However, all of our birds are hand fed twice a day.)

The training process was developed in many steps. Below you will find the protocol that I used:

1. **Training for collection presentation (milking)**
    a. Begin by acclimating bird to human touch
        i. Throughout the day and during feeds, slowly approach male bird, pat the bird's stomach and reward with a capelin fish or a verbal "good job".
            1. If the bird eats outside of the feed, the number of fish eaten needs to be added to the daily total amount
            2. After the bird feels comfortable with the belly "pats", the keeper can then continue with belly "rubs" or massages. See Figure 1: Belly Pats
            3. After the bird feels comfortable with belly rubs, trainer begins massaging the vent area. See Figure 2: Vent Area Massaging with Bird Upright.
            4. All of the training steps are labeled in the training logs. Belly pats are BP; belly rubs are BR and vent area massages are VA.

b. Once the trainer feels that they can pick up the bird without too much of a fight, the trainer picks up the bird and brings the bird to the penguin sink counter. Ideally, you are training the bird not only to be comfortable with one massaging the vent area, but also getting the bird comfortable standing on the sink. (A towel is placed on the stainless steel sink for bird's comfort). Trainer always rewards bird with a verbal "good job".
    i. The trainer picks up the bird with both hands holding the wings close to the bird's body.
    ii. All of these birds have been picked up before for weigh-ins, so they should not get stressed out.
    iii. If the bird becomes too stressed (the trainer's judgement is required), set the bird back down on exhibit and begin rubbing the bird's stomach.
    iv. Trainer begins vent massaging the bird, increasing the length of time massaging is being done. (Bird is standing up)
    v. Throughout the training, trainer should continually reward the bird with verbal sayings, all positive.
    vi. If the bird becomes too stressed, try belly rubbing or belly patting the bird to try and calm him down. If this doesn't work, discontinue the session for that time.
c. Finally, trainer should begin acclimating the bird to having him lay on his belly.
    i. This part of training should be done either on exhibit or on the sink counter.
    ii. Trainer will need to restrain bird in this position by placing an arm over the backside of the bird. Restraint should continue as long as the bird feels comfortable.
    iii. Next, trainer lifts bird's tail and using both hands, massages vent area in an inward/upward motion, gradually exposing the cloaca. See Figure 3: Stimulating for Collection.

2. Training for Sample Collection

a. Train bird for sample collection position as described above
    i. Before collection is obtained, cloacal area should be cleaned with a dry towel or dry sterile gauze.
b. Bring in second person, the "collector"
    i. Trainer begins massaging and exposes the cloaca.
    ii. Collector collects semen in a 1cc syringe. Trainer and collector collaborate on each bird to determine when to stop collecting. (dependent on behavior of bird, sample size, etc.)
    iii. Bird is placed back into holding to calm down.
    iv. Collected sample is then analyzed.
c. Once the bird is trained for this, the whole positioning of the bird and collecting of the semen should only take 5-10 minutes (Zoo Biology 18:199-214 (1999)).

3. Rules of training

a. Diet, weights, stress levels, and training status were monitored throughout the breeding season by using an easy to read chart. The chart will include columns for bird ID#, time, weight, stage of training, total daily food intake and comments.
b. Weights were taken weekly before the morning feed.
c. Diet was recorded daily

d. Training time, stress levels and training status was recorded after each session.
e. Collection training was done with both non-breeding and breeding males.
f. Rewards were always be food or positive vocal commands.
g. If a bird becomes too stressed out during any stage of training, the training will stop and take a step backwards.
h. "Collection" took place on the penguin sink counter. Due to the temperature difference from the sink to the exhibit, body temperature will be watched closely. If a bird becomes too warm, the session will end.

The stars of the study were:

R113 with a date of birth of 18 Dec 1999
R175 with a date of birth of 13 Dec 1987
R191 with a date of birth of 14 Dec 1987
R219 with a date of birth of 15 Dec 1987
R221 with a date of birth of 15 Dec 1987
R230 with a date of birth of 16 Dec 1987

Were we successful in our collection attempts?

We started collecting on September 17, 2004, a couple of weeks prior to breeding season. During this time, all of the birds were calm during each collection. We were able to collect a sample out of five birds. However, we ran into problems with temperatures of the microscope and the hot plate. Because of this, we were unsure of what the sample was. R113 did not give us a sample during this time.

The first week we collected semen with sperm was on October 1, 2004. We saw this from R221 and R230. On October 7, 2004, we placed river rocks on exhibit for nesting material to officially start breeding season.

On October 15, 2004, we collected again and were able to see sperm on five of the males. We didn't see sperm on R113, the youngest. By October 28, 2004, we were able to see sperm on all of the birds involved in the study. From this point forward, we collected weekly until we stopped seeing sperm from each bird two weeks in a row. We were able to collect semen with sperms from 2-9 weeks, depending on the bird. We were able to collect semen with sperm on R113 for 2 weeks and on R175 for 9 weeks. We saw the last amount of sperm from one bird, R175, on December 17, 2004.

We successfully collected semen from all six birds in the study. Most of the collections occurred on Fridays at 1400 hours. During R175's last three collections, he milked himself. He seemed to get the signals as soon as he was picked up and set on the sink counter. He received all of the cues and knew exactly what to do!

Throughout the study, each bird was monitored by their behavior, food consumptions and weight. Each bird exhibited normal penguin behavior.

(Photos provided by the authors)

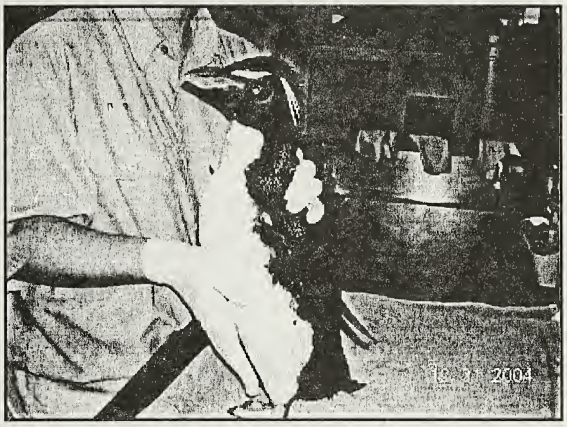
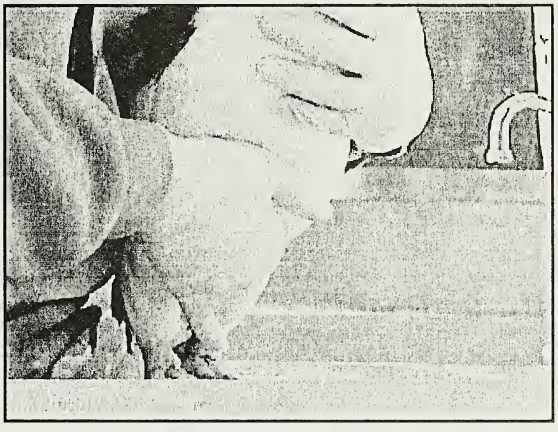


Figure 1: Belly Pats

Figure 2: Vent Area Massaging with Bird Upright



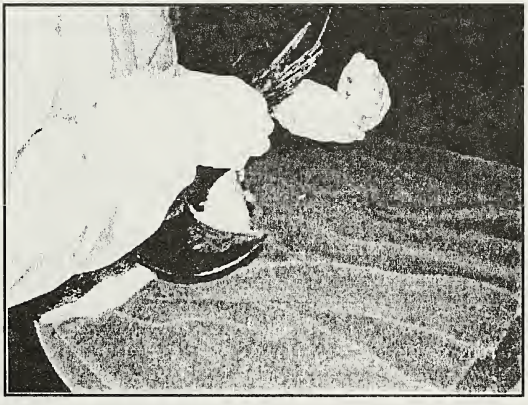


Figure 3: Stimulating for Collection

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Legislative/Conservation Update

Compiled by Georgann Johnston
Legislative Advisor
Sacramento, CA

Swedish Storsjoodjuret Loses Endangered Species Status

The Swedish government has removed that country's Storjon monster from the endangered species list. Historically, a large unknown creature has been seen in the lake for over 350 years. Since 1987 the Society for Investigating the Great Lake has collected some 400 reports of "Storsjoodjuret," as the Swedes call the monster.

Like its cousin in Loch Ness, the serpentine inhabitant of Lake Storsjon has been elusive and relegated to the category of "myth" rather than reality. One Swedish critic of the government's action stated that "absence is not proof of absence" and that authorities have previously declared both the giant squid and the petrel extinct prior to living examples being discovered. *Source: Wall Street Journal 11 November 2005*

Grizzle Bears May Lose Protected Status in U.S.

The Yellowstone grizzly bear (*Ursus arctos horribilis*), one of the first and most controversial animals to be protected by the Endangered Species Act, has been declared "fully recovered" by the federal government. The USFWS is now moving to remove the safeguards protecting the species which have been in place for nearly three decades.

The number of bears has gone from a low of 200-300 in the 1970s to more than 600 in of Yellowstone National Park and surrounding areas. "This has been a very long process," Interior Secretary Gale Norton said after the department announced it would published a proposed delisting of the animal. If delisting occurs it will likely take effect in late 2006.

Federal government biologists say years of research demonstrated the bear population around Yellowstone to be robust and recovered. The delisting is also supported by the National Wildlife Federation. Other preservation groups, including the Sierra Club and the Natural Resources Defense Council, oppose delisting. They claim that while the number of bears is healthy, some of the bears' critical food sources, such as the white bark pine nut, are in steep decline, which could force the bear to leave the park in search of food. "If you don't protect the habitat, it doesn't matter how many bears you have – you'll lose them," said Lance Craighead, director of the Craighead Environmental Research Institute in Bozeman, Montana, who maps grizzly bear habitat. *Source: Sacramento Bee Newspaper 17 November 2005*

Suspect Science Defeats Protection of Miami Blue Butterfly

The USFWS decided in early 2005 to deny ESA protection to the Miami blue butterfly (*Hemiargus thomasi bethunebakeri*). The decision acknowledged in May that the butterfly merits protection but declined to add it to the protected list citing lack of funding. This claim has hampered efforts to protect a variety of species and many claim that it is a common strategy of the Bush administration in its efforts to undermine the ESA.

The USFWS argued that the Miami blue is a low priority for protection because biologists had failed to reintroduce the butterfly to its former range. However, the director of the reintroduction program, Thomas Emmel, an ornithologist at the University of Florida, said his ream has established 12 breeding colonies at Everglades and Biscayne National Parks that have successfully reproduced in the wild for several generations. Emmel charges that the USFWS's assessment is false and knowingly downplayed the reintroduction program's success to make saving the butterfly appear too costly and difficult.

The blue-winged butterfly, whose natural habitat is the Florida Keys, is most threatened by loss of habitat to development, mosquito spraying and the decline of native ants that protected the butterfly from predators. It was believed extinct after Hurricane Andrew in 1992, until a photographer's sighting in 1999 uncovered 35 Miami blues at Bahia Hondo State Park. *Source: Endangered Earth; Newsletter of the Center for Biological Diversity Fall 2005*

Mexican Gray Wolves Imperiled by USFWS Activity

A group of independent scientists warned in 2001 that government predator control policies threatened the future of wild Mexican gray wolves (*Canis lupus baileyi*) in the U.S. but the warnings have allegedly gone unheeded by the USFWS. Additionally, in late 2005, federal officials convened to consider two controversial measures which contradict scientific recommendations for wolf recovery.

The first measure would place a moratorium on releasing captive-bred Mexican wolves to the wild and limit re-release of captured wolves. The second measure is a rigid predator control policy that would increase government trapping and shooting of wolves. The proposed measures would exacerbate long-standing management problems that have hindered the Mexican wolf's recovery.

The USFWS's aggressive control program differs significantly from its management of any other endangered species; wolves are trapped for the sole reason of roaming outside the political boundary of their designated recovery area. Unfortunately, trapping not only unnecessarily plucks wolves from the wild, it can result in severe injures and stress. The other primary justification of the USFWS for trapping is that the wolves conflict with livestock. Most of the Mexican wolf's current range is grazed year-round, so wolves inevitably encounter livestock. Notwithstanding, wolves naturally prey on elk and deer and studies indicate that most wolves that attach livestock have learned to do so from scavenging on livestock that died of other causes.

A public comment period and other procedures are in the works to endorse, modify or defeat the USFWS two proposals for management of the wolf populations. *Source: Endangered Earth; Newsletter of the Center for Biological Diversity Fall 2005*

Review of 108th Congress Animal-Related Legislation

The 108th Congress made some substantial progress for big cats, sea turtles, farm animals and welfare enforcement funding. However, it also dramatically weakened some existing wildlife protections. Some highlights of the legislative year include the following.

Humane Methods of Slaughter Act Enforcement. Congress directed the USDA to use $5-8 million solely for enforcement of the federal humane slaughter law. The legislation called on inspectors to ensure slaughterhouse compliance with particular attention to unloading, handling, stunning, and killing practices, along with a new system for tracking violations.

Animal Welfare Act Enforcement. Passed an 81% increase to the AWA funding to allow an increase from about 60 inspectors to more than 100 inspectors to look for AWA violations in a variety of industries including airlines, circuses, and laboratories.

Multinational Species Conservation Fund. Approved a steady increase in funding over three years for the African Elephant Conservation Act, the Indian Elephant Conservation Act, the Rhinoceros and Tiger Conservation Act, the Great Ape Conservation Act and the Marine Turtle Conservation Act.

Hoop Barns. Funding to promote "hoop barns" as a sustainable agriculture alternative to factory farm confinement systems. These inexpensive, easy to install, open ended structures allow animals freedom of movement and access to pastures.

Wild Horses and Burros. An appropriations bill rider from the Bureau of Land Management will allow the BLM to sell "without limitation to the highest bidder, any horse or burro more than 10 years of age or who has not been adopted after three tries out of the BLM's already overcrowded adoption system. The bill opens the door to send potentially thousands of wild horses and burros to slaughter for human consumption.

Migratory Birds. Certain "nonnative" species were removed from the list of birds protected by the Migratory Bird Treaty Act, allowing anyone to shoot and kill them with impunity. The Act, over 100 years old, recognized the need to protect birds traveling along their migratory routes and crossing international boundaries, regardless of whether they are native to the U.S. A driving force behind this legislation was the continued attempt to blame mute swans and other species for the degradation of the Chesapeake Bay, even though most experts acknowledge that the bay's problems primarily come from massive poultry operations, over-development, swage treatment plants, and other sources of environmental pollutants.

An extensive list of legislation and its fate, along with a detailed "report card" on the voting activity of each individual Senator and Congressional Representative can be found at www.hsus.org. <http://www.hsus.org./ *Source: The Humane Scorecard, a Project of the Humane Society of the U.S. October 2005*

UN Calls for Closures to Protect Sea Turtles

The United Nations GeneralAssembly is scheduled to vote on a resolution that calls for closures of fishingin areas where large numbers of critically endangered sea turtles arecaught or killed. The critically endangered Pacific leatherback sea turtle (*Dermochelys coriacea*) is on the verge of extinction and is expected by scientists to go extinct in the next 5-30 years unless immediate measures toeliminate threats posed by industrial longline fishing are taken. Environmentalists are pleased at this first step but warn that a moratorium on destructive longline fishing is needed in the Pacific if the leatherback is to survive.

"We are pleased that the UN is finally moving closer to the worldwide consensus that something urgently needs to be done to prevent the extinction of the leatherback and loggerhead sea turtles (*Caretta caretta*) in the Pacific," said Robert Ovetz, Save the Leatherback Campaign Coordinator of the US-based Sea Turtle Restoration Project which is leading the advocacy effort by a coalition of international environmental organizations.

Last June a parade of schoolchildren dressed in sea turtle costumes delivered a petition to the UN signed by thousands of citizens, 1,007 scientists from 97 countries and 281 non-governmental organizations from 64 countries urging it to implement a moratorium on high seas industrial longline fishing in the Pacific. The list of signersincludes famed primatologist Dr. Jane Goodall, Harvard biologist E.O. Wilson, oceanographer Dr. Sylvia Earle, a National Geographic Explorer-in-Residence, and former U.S. astronaut Bernard Harris, Jr. M.D.

According the recent reports in the scientific journal *Nature*, the100-million-year-old leatherback sea turtle is on the brink of extinction. The population of female nesting leatherbacks has declined by about 95% since 1980.

Dr. James Spotila, a co-author of one of the reports, signed the petition to the UN and testified before the UN this past June. "The descent of the leatherback toward extinction is a global ecological tragedy that affects us all. As goes the leatherback, so goes the ocean," warned Dr. Spotila. Dr. Spotila is the President of the International Sea Turtle Society, President of The Leatherback Trust, and Betz Chair of Environmental Science at Drexel University.

The language endorsing a set of guidelines recently drafted by the UN Food and Agriculture Organization originated at the June meeting of the UN Open-ended Informal Consultative Process on Oceans and the Law of the Sea. On the first day of the meeting, all nations that have signed the convention and regional fisheries management organizations were directed to urgently implement the closures and other measures outlined in recent UN FAO guidelines for reducing interactions with sea turtles. Similar language calling for time and area closures to reduce the bycatch (the unwanted capture and killing of ocean wildlife) of industrial fishing also appears in the same section of the resolution. These two recommendations were included in the resolution that was to be voted on by the UN General Assembly.

"While proposing time and area closures is a good first step the UN has a long way to go to heed the call of the scientific community to implement a moratorium on longline fishing in the Pacific. A moratorium would give us the time to put proven conservation measures into place to keep the leatherback from dropping off into oblivion forever," Ovetz added.

Resources:
• For a copy of the UN draft fisheries resolution go to:
http://www.seaturtles.org/pdf/_finalfishresol.11_10_05.pdf
• For a copy of the Sea Turtle Restoration Project's new book Striplining the Pacific on the impact of longline fishing on the Pacific leatherback go to:
http://www.seaturtles.org/press_release2.cfm?pressID=259
• For a copy of the scientist and NGO letters to the UN calling for a moratorium on longline fishing in the Pacific go to:
http://www.seaturtles.org/press_release2.cfm?pressID=261
• For a review copy of the Sea Turtle Restoration Project's new documentary film Last Journey for the Leatherback? contact Robert Ovetz, PhD at 415 488 0370 x 106.
Source: The Sea Turtle Restoration Project, POB 400/40 Montezuma Ave., Forest Knolls, CA 94933 USA.

Proposal to Kill Elephants Splits Wildlife Groups
Wildlife groups meeting with South Africa's environment minister are split over a proposal to cull the growing elephant population in the country's flagship national park. The Environmental Affairs and Tourism Ministry said earlier this year it was considering resuming the elephant kills in Kruger National Park, one of South Africa's top tourist attractions, on the advice of South African National Parks officials. South Africa stopped culling in 1995, partly because of local and international pressure.

"The Kruger National Park attracts 1.3 million tourists a year and South Africa's reputation as a custodian of wildlife can only suffer if the shooting starts again," said Jason Bell-Leask, southern African director for the International Fund for Animal Welfare. Bell-Leask called culling a "cruel, unethical and a scientifically unsound practice" and said the government should first consider other options such as the use of cross-border "megaparks" to allow greater movement of elephants between countries, and more widespread use of contraception. Environmental Affairs and Tourism Minister Marthinus van Schalkwyk has said adjacent parks and game reserves are also full, and that contraception is expensive and poses practical problems.

The World Wide Fund for Nature expressed support for the government approach, however, saying it was sure culling would not be undertaken without due consideration of alternatives. Kruger officials have said that without action, the elephant population will triple to 34,000 by 2020, posing a threat to other animals and vegetation in the Israel-sized reserve. South Africa is consulting neighboring African countries also affected by increasing elephant populations, but there is no regional consensus about how to manage the herds.

"Given elephants' ability to transform an entire landscape, action is needed, or the result will be the mass starvation of elephants and other species," said Rob Little, Conservation Director for WWF South Africa.

The Elephants Alive Coalition of environmental groups said tourists would "be disturbed by the prospect that the elephants they enjoy watching and photographing during their safari one day, could easily be hanging upside down from a meat hook ... the next." Environment Ministry spokesman J.P. Louw referred to claims that a resumption in elephant kills would prompt a boycott by foreign tourists as "intimidation tactics." He added in an interview that van Schalkwyk was holding consultations with authorities in Europe — the source of most foreign tourists to South Africa — to ensure they understood the problems involved in managing elephants.

Representatives of communities bordering the park are in favor of culling, saying the proceeds would provide badly needed jobs and revenue. They say that, with the increasing population, elephants break through park fences more often and pose a threat to nearby villages. South Africa, Namibia and Botswana all have booming elephant populations, while East African nations such as Kenya struggle to increase their herds, which were decimated by poaching in the 1980s. Trade in ivory has been banned since 1989 to try to combat poaching. South Africa has repeatedly appealed to the U.N. body monitoring endangered species to lift the ban on trade in ivory to allow the proceeds to be invested in parks. *Source: Associated Press Report of November 28,2005*

Red River Hog Introduction at Disney's Animal Kingdom Lodge

By Courtney Hunter, Animal Keeper
Disney's Animal Kingdom Lodge, Lake Buena Vista, FL

Introduction

Disney's Animal Kingdom Lodge

Disney's Animal Kingdom Lodge (DAK Lodge) is an African lodge-style resort with 1293 rooms surrounded by 33 acres of animal habitat. Located approximately one mile from Disney's Animal Kingdom (DAK), the Lodge offers a unique setting where guests can view about 200 African animals that live in one of three 11-acre savannas.

The husbandry procedures at DAK Lodge differ from many other institutions. The three savannas are home to 14 species of mammals and 16 species of birds that are shifted off exhibit into two different barns and various holding areas using a number of different audio cues several times throughout the day. The animals remain in holding for approximately two hours and are then released back into their savannas, where the majority of them spend the remainder of the day and night.

Sunset Savanna

Sunset Savanna is one of the 11-acre mixed species exhibits that houses both mammals and birds. In addition to 1.2 red river hogs (*Potamochoerus porcus*), the savanna contains 1.4 nyala (*Tragelaphus angasii*), 1.2 Grant's gazelles (*Gazella granti roosevelti*), 1.3 waterbuck (*Kobus ellipsiprymnus*), 1.2 ankole cattle (*Bos taurus taurus ankole*), 3.0 giraffe (*Giraffa camelopardalis reticulata*), 2.3 Ruppell's griffon vultures (*Gyps rueppellii*), 0.5 ostrich (*Struthio camelus*), 1.2 marabou storks (*Leptoptilos crumeniferus*), 3.0 East African crowned cranes (*Balearica regulorum* gibbericeps) and 0.2 Abyssinian ground hornbills (*Bucorvus abyssinicus*). The hoofstock are shifted off exhibit into the barn mid-morning, while most of the birds are simultaneously shifted off exhibit into a separate bird holding area.

In order to closely monitor the activities of the hogs, we are currently releasing them onto Sunset Savanna as the birds and hoofstock are released from holding in the early afternoon. We sound an audio cue and bring the hogs back into holding in the evening, where they remain overnight.

Why Red River Hogs?

With our current success at maintaining large mixed species savannas, we wanted to introduce an African species that was not traditionally managed in such a large and diverse exhibit. Additionally, we preferred a species not frequently seen in North American zoos in order to provide a more extraordinary exhibit for our guests. We believed Sunset Savanna would provide an extremely enriching environment for the hogs as well as optimal guest viewing.

The four-month introduction process was structured and monitored by DAK Lodge keepers and management, and the hogs have been on exhibit with the rest of the animals since early December, 2004.

0.2 Red River Hogs

We received 0.2 red river hogs "Laurel" and "Cinnamon" from quarantine in late August, 2004. The hogs' holding area is underneath the Lodge (at ground level) and consists of three pens connected via sliding doors. The hogs were shifted from one pen to another in order to receive their grain diet. Keepers honked a bike horn as the hogs were shifted in order to promote an association between the audio cue and the delivery of their diet.

On August 29, the two female hogs were given access to their outdoor acclimation pen (Figure 1).

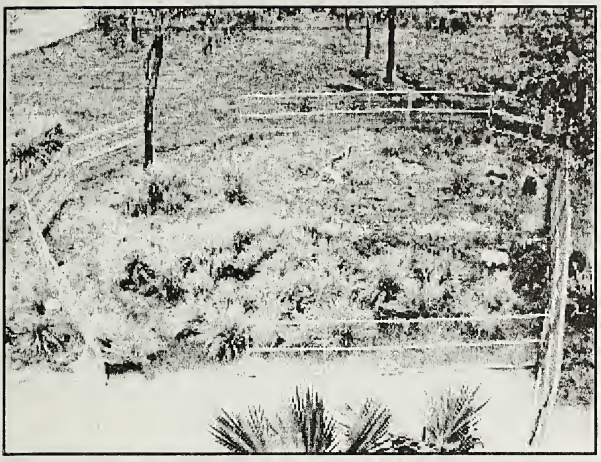


Figure 1. Red river hogs' temporary acclimation pen.

This chain link enclosure shared a fence line with Sunset Savanna. The purpose of the pen was to allow visual, auditory and limited physical contact between the hogs and the animals with whom they would eventually share an exhibit. At this time, a hotwire fence and gate running through the enclosure were turned off in order to prevent any negative experiences from occurring within the pen. By the end of August the females were in the acclimation pen for approximately one hour in the morning and two in the afternoon. When bringing them into holding, keepers honked the bike horn and rewarded them for responding with either grain or produce. By early September, we began shutting the hogs in the lower half of the acclimation pen with the hotwire fence turned on in order to promote interactions with those animals in Sunset Savanna as well as expose them to a common barrier they would encounter once released.

Introducing 1.0 Red River Hog

On October 6, we received 1.0 red river hog "Gaylord" from quarantine. When given access to the buffer stall separating him from the females, they sniffed one another through the fence, but no aggression was seen. He was extremely hesitant to leave holding and enter the acclimation pen by himself, and by the time we introduced "Gaylord" to "Laurel" and "Cinnamon," he had only ventured half-way between his holding area and the acclimation pen.

Following a protocol recommended by the Population Management Plan (PMP) manager, our veterinarian administered a dose of Azaperone (a mild tranquillizer) to "Gaylord" as a precautionary measure before introducing him to "Laurel" and "Cinnamon." The introduction occurred on November 10, and was uneventful. The hogs were monitored throughout the day as the Azaperone wore off, but everything went extremely well and the hogs remained together overnight. To prevent possible aggression, we continue to separate the girls from "Gaylord" when they receive their grain and produce.

Protected Contact Interactions

Throughout the month of November, all three hogs were given access to the acclimation pen together for an hour in

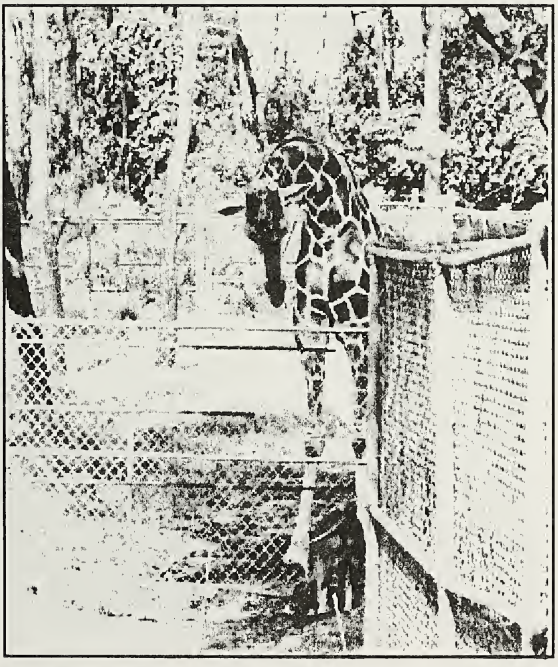


Figure 2. Protected contact interaction between "Gaylord" and giraffe through the temporary acclimation pen.

the morning and a few hours each afternoon. During this period, several animal encounters were observed. The majority of these involved our giraffe, as the hog acclimation pen was in an area often utilized by the giraffe. When animals would move near the pen, it was noted that the hogs showed little fear and would approach the visitor head-on. On one occasion, one of our giraffe was seen kicking at the fence as "Gaylord" approached his feet (Figure 2).

The Grant's gazelles and nyala would snort and bark from a distance, although on one occasion 1.0 nyala was seen head-butting the fence in response to "Gaylord's" direct advance.

Free Contact Interactions

On December 1, 1.2 red river hogs were given access to Sunset Savanna, along with 0.4 nyala, 1.2 Grant's gazelles, 1.2 ankole cattle, 3.0 East African crowned-cranes and 0.1 ostrich. The hogs' acclimation pen was altered so that a "hog sized" opening (or "creep") in the fence could allow the hogs access to and from their pen, but prevent access to the larger animals. Brief interactions occurred with both the nyala and ankole, but little contact was made (Figure 3).

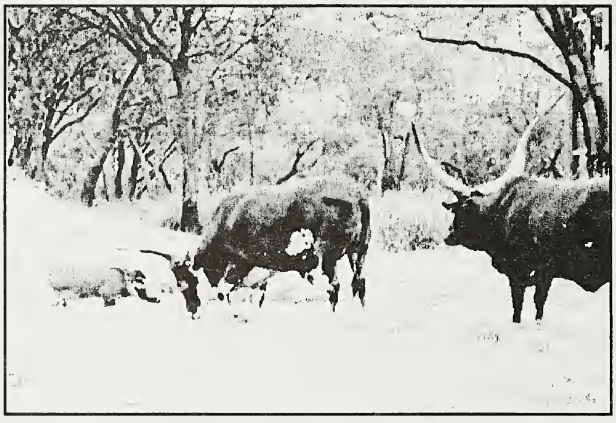


Figure 3. "Gaylord" meets two resident ankole.

The hogs did not venture far from their acclimation pen, and responded successfully to the bike horn cue by entering holding in the late afternoon.

On December 2, 1.0 nyala was also given access to the savanna, as well as 1.3 waterbuck, 3.0 giraffe, 1.2 hornbills, 1.2 marabou storks, 0.5 ostrich and 2.3 Ruppell's griffon vultures. All of the birds would retreat at the approach of the hogs, and at one point one of our giraffe kicked at "Gaylord" when the hog approached too closely (no injuries were sustained). A brief interaction occurred when our male waterbuck lowered his head at "Gaylord's" approach, but no contact was made.

By December 4, the hogs appeared comfortable moving farther away from their acclimation pen (Figure 4).

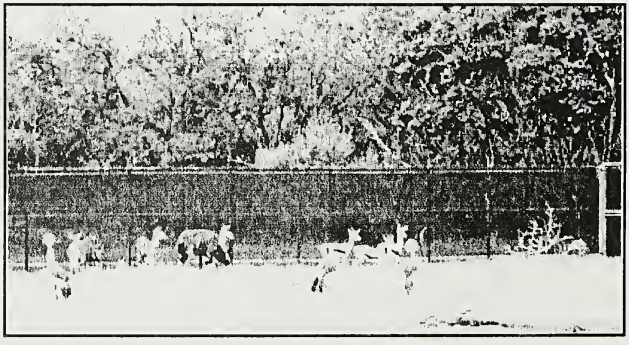


Figure 4. "Gaylord" (far right) meeting 1.4 nyala, 1.2 Grant's gazelles and 3.0 East African crowned cranes.

In crossing the savanna, the hogs ventured into one of the savanna's two pools, but primarily seemed interested in rooting. "Laurel" and "Cinnamon" remained in close proximity to one another, and almost exclusively followed "Gaylord" around their new surroundings. The Grant's gazelles and nyala followed "Gaylord" and the girls on several occasions, but would retreat whenever the hogs approached.

Current Situation

Since December, the novelty of the hogs has seemingly worn off those other animals on Sunset Savanna. When keepers place hay and enrichment throughout the exhibit, the hogs have been seen displacing Grant's gazelles, nyala, waterbuck and all the bird species. However, if the hogs get too close underfoot, the giraffe will generally respond with a warning kick in the offender's direction.

Interestingly, in informal conversations with guests on Sunset Savanna, keepers have gotten more questions about the hogs than any other animal since their release. Keeper observations have shown very high activity levels of the hogs when on exhibit (mostly rooting and moving around the savanna), which leads us to conclude that the savanna offers a high level of enrichment for these animals. In addition to these positives, keepers have especially enjoyed the diversity the red river hogs offer to the collection and husbandry routine. We will continue to monitor the behavior of the animals to ensure that everyone continues to coexist positively with one another.

Figure 5. "Gaylord," "Laurel" and "Cinnamon" moving around the savanna.

Figure 6. "Gaylord" moving around the DAK Lodge.

Acknowledgements

Many thanks to the entire Animal Programs team here at DAK Lodge. Our keepers, managers and curator all played integral roles in the acquisition of the red river hogs and the success of the introduction.

(Photos provided by the author)

Chapter News Notes

Birmingham Zoo AAZK Chapter

Our first year is wrapping up and it has been an extremely productive one so far! Members brought the AAZK Chapter of The Birmingham Zoo back to life, and we are proud of our accomplishments. For the first time in our Chapter's history we have a logo, which was designed by Brent Peavy, Reptile Keeper. Since re-chartering the Chapter, four individuals have served as executive members, but are not current officers: Josh Randolph, Mandy Wheat, Tara Cecil, and Nikki Strain. We thank them for their contributions.

Current officers are:
President.....Peggy Hoppe
Vice-President.....Vacant
Secretary.....Erica Peth
Treasurer.....Michelle Allen
Liaison.....Denise Monroe
Management Liaison.....Beth Severson

Our first fundraiser was held in March during spring break week and was a huge success. Keepers set up booths throughout the zoo with children's games and face-painting. With two full days of activities we raised over $700. A donation of $500 was made to the Alabama Wildlife Rehabilitation Center at Oak Mountain State Park, Birmingham, AL.

Our next efforts were focused on raising money to donate to Pallas' Cat SPF (Specific Pathogen Free) Research at the North Carolina State University. Two Pallas' Cats from our zoo's collection were sent to participate in this study. Over the summer, with various fundraising activities, and with a lot of help from our teen volunteers - AAZK has donated $2,000 to this endeavor.

One activity AAZK sponsored to raise this money was a series of "Keeper Encounters". For a small fee, members of the public were invited to meet keepers, tour behind the scenes in a particular area, learn about their unusual jobs, and have an up-close animal encounter. The majority of encounters were full, and everyone had a great experience.

In the aftermath of Hurricane Katrina, AAZK held fundraisers to aid in disaster relief efforts. AAZK sponsored a moon walk for kids and collected donations from zoo employees. We raised $500 for the AZA relief effort, with funds going to the Audubon Nature Institute. An additional $500 was sent to Petfinders.com and the Greg Biffle Foundation, two organizations devoted to the rescue of animals affected by the hurricane.

"*Boo at the Zoo*" (*BATZ*) was another great opportunity for AAZK to raise money. Using Rodriguez Fruit Bats as our theme, we raffled plush bats and framed photographs. The grand prize was a one-year family membership to the zoo. The raffle raised over $600 and volunteers raised over $300 at *BATZ*, bringing our total to $900 for the Rodrigues Environmental Educator Project.

The group has focused on many projects during the year, some of which are still in the design phase. Our members are excited and enthusiastic, and with no signs of slowing down, we look forward to another exciting year ahead.

--Denise Monroe, Chapter Liaison

Cheyenne Mountain Zoo AAZK Chapter

The past year has been an eventful one for our mountain Chapter. We finished out the year with a bake sale that was held over the span of three nights during the zoo's Electric Safari event. The homemade goods went fast, and the hot chocolate even faster. By the end we raised a whopping $1,000!

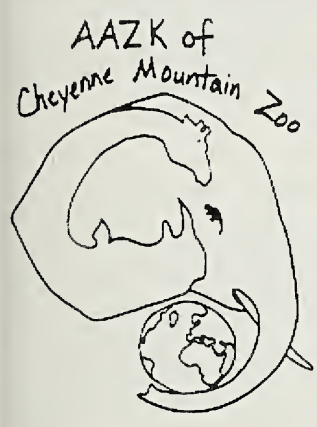
We also enjoyed a smashing success creating and selling our fist ever, Year in Rearview Cheyenne Mt. Zoo calendar. We sold close to 600, which brought in close to $4,000! Our next calendar will feature our animal's noses titled, The Pick of the Year. They will be sold in our gift shop and by special order.

Bowling for Rhino's went well this past year. We earned close to $1,400 for the worthy cause.

We wanted to make a bigger donation this year so we held two separate events specifically designed for BFR. We called them, "Kids 4 Conservation" and "Rhino Rally". Both involved fun activities such as mini-bowling that kids could play after a donation. It was a good time for the participants and AAZK members. By the end we raised an estimated $400. Another fundraising event was, "Melon Munching Madness" which involved cantaloupe treats for our elephants and hippos.

Our year would not have been complete without, "Art on the Hoof". Guests dined on appetizers and admired fabulous art. The event raised $2,600 and all who attended went home with a one of a kind piece of animal-themed art.

All our fundraising made it possible for us to donate to worthy organizations such as, BOS and the Snow Leopard Trust. We sent many AAZK members to conferences and splurged on zoo our animals.



Our Chapter was highly involved with our zoo's first ever Dream Night at the Zoo event. We purchased many items for goodie bags, decorations and programs. We also set-up and worked a booth for kids to make enrichment that we fed to the animals that very night.

Cheyenne Mountain Zoo Chapter Current Officers are:
President.....Megan Ryder
Vice. President.....Jenyva Turner
Treasurer.....Kathy Ober
Secretary.....Roxanna Breitigan
Liaisons.....Jacki Moore and Rebecca Zwicker

We are planning this year to be as exciting and ambitious as the last. We wish all other AAZK Chapters a wonderfully wild year.

--Rebecca Zwicker, Co-Liaison

Utah Chapter AAZK

Greeting from the Wassatch front of Utah. We are pleased that Bowling for Rhinos was a huge success. Two of our members Crystal Derusha and Brandy VonWeissenstein are headed to Africa. They not only collected money in bowling pledges but also organized a brass rhino sit-a-thon for the week before our event. They raised $14000 for BFR winning second place nationwide. We are hoping our 2006 BFR in April will be bigger and better than this year.

Labor Day is a big zoo day and in Utah we celebrate with Cheetah Cha Cha. This is our 9th year of Cha Cha, an event that raises money for the Cheetah Conservation Fund, Kenya. Nine local bands played throughout the day as AAZK members sold cheetah merchandise, volunteers lead cheetah conservation games and were dunked in a dunk tank, and keepers met the public to educate about the peril of wild cheetahs. We were also lucky to participate in the Cheetah Expressions traveling art show. Each piece of art was made by Kenyan children and reflects what CCF has taught them about the cats that live in their country. At the end of the day we raised $3600 for CCF, Kenya.

If you would like to support CCF, Kenya, our Chapter will be selling Cheetah Expression 2006 wall calendars for $12. Quantities are limited. Please contact utahaazk@hoglezoo.org

We raised $1300 for our Heidi Harmon Professional Development Fund by valet parking at Hogle Zoo's Gala event. The fund will be used to send AAZK members to conferences and workshops in 2006. This fundraiser was fun for the members and friends who parked the cars of the guests and talked up AAZK and how the organization benefits each of us.

Our officers for 2006 are:
President.....Bethany Bingham
Vice President.....Crystal Derusha
Treasurer.....Amanda Ista
Secretary.....Stephanie Jochum-Natt
Liaison..... Richie Oliver.

In the coming year we are looking forward to Keeper for a Day and animal artwork fundraisers. We hope everyone in the Southeast hit with the hurricanes will be able to recover and that this year will be great for everyone.

--Joanne Randinitis, Liasion

The Feather Distribution Project: Protecting Wild Parrots and Macaws from Home

By Catherine Vine, Bird Keeper
The Philadelphia Zoo, Philadelphia, PA

The Philadelphia Zoo has been participating in the Feather Distribution Project for over a year. Feathers from the zoo's hyacinth, green-winged, and blue and gold macaws are saved and sent to the project.

What Is It?

In 1982, Dr. Jonathan Reyman delivered a package containing several hundred parrot and macaw feathers to a member of the Cochiti Pueblo in New Mexico. These feathers, obtained from pet stores as they were molted by the birds housed there, were used in religious ceremonies by the people of the Cochiti Pueblo. With this donation, the Feather Distribution Project began.

Since its humble beginnings in 1982, the project has donated more than 7,000,000 feathers to 29 of the 31 Pueblos in New Mexico and Arizona free-of-charge. These feathers are used to create a variety of traditional religious items. They become part of masks, prayer plumes, and prayer sticks. Feathers also adorn altars and kiva ladders, become part of ceremonial clothing, and are used at shrines as offerings to gods and spirits. Some feathers are also donated to members of the Native American Church, which encompasses many tribes. They are used on ceremonial fans and to decorate members and other ceremonial objects.

It can be quite difficult for Pueblos to obtain the necessary feathers for ceremonial purposes. Feathers on masks and clothing are used as long as possible; those on prayer plumes, sticks, and bundles can only be used once. There is a continuous demand for feathers, and a very limited supply. Pueblo religious leaders can obtain feathers from a variety of sources. Some are borrowed from friends and relatives. Others buy feathers from commercial dealers and from trading posts and stores near the reservations or online. Unfortunately, customers often have no knowledge of how these feathers were obtained. Some dealers obtain feathers from birds that have been captured or killed in Latin America and illegally smuggled into this country. There is no evidence that dealers in the Southwest smuggle feathers, but they may inadvertently buy smuggled feathers (DNA testing could be used to determine this). Along with decimating wild parrot and macaw populations, this type of capture often leads to the destruction of habitat and further impacts parrot and macaw conservation. Some Pueblos avoid the need to purchase feathers by keeping birds themselves. These birds may be plucked in order to obtain the necessary feathers.

The Feather Distribution Project seeks to provide needed parrot and wild turkey feathers to the Pueblos of New Mexico and Arizona in order to reduce the need to buy feathers from commercial dealers and to eliminate the plucking of captive birds. Feathers are always provided at no cost. Pueblo individuals in possession of a parrot are offered twice as many feathers as that bird would molt annually providing they promise not to pluck their birds. By providing feathers free-of-charge, the project has reduced the commercial value of parrot and macaw feathers, and has decreased the number of advertisements to buy feathers in magazines and online (with the possible exception of eBay®).

The Future of the Project

The eventual goal of the project is for the Pueblos to become self-sufficient at obtaining needed feathers. Plans are underway to establish a parrot and macaw facility on Pueblo land in New Mexico. This facility would be built and operated to meet modern aviculture standards and practices. It would provide a home for some of the large number of unwanted pet birds from across the country. It will also provide care by avian vets to those Pueblo people who have parrots. No imported birds

will be accepted at the facility, and thus it will not negatively impact wild populations. Molted feathers will be collected from these birds and used as needed. A portion of the facility will house a museum that will highlight the historical importance of birds to the Pueblos. In addition, a small gift shop will feature hand-made Pueblo art including baskets, pottery, and jewelry.

There is also a proposal to re-stock wild turkey populations on some Pueblo lands. The National Wild Turkey Federation has already re-stocked them at Zuni and possibly at one or two other Pueblos, as well as on Apache lands. Once the populations are re-established, the turkeys could be hunted commercially, while the Pueblos continue to hunt them in limited numbers for their own use. Non-pueblo hunters would be required to hire a Pueblo guide, which will ensure the safety of shrines and other sacred areas, and will provide income for Pueblo villages. Pueblo members will clean and pack turkeys for hunters free-of-charge if the feathers are donated to the Pueblo.

With the creation of an avian facility and the restoration of wild turkeys to the area, Pueblos may once again be self-sufficient at obtaining feathers for religious purposes without the need for purchasing feathers from dealers. Both the facility and the commercial turkey hunting will provide income for the Pueblos, which in turn can be used to support the cost of running the facility and providing veterinary care to its residents.

How Can You Help?

Until the Pueblos become self-sufficient, there is an increasing need for feathers as awareness of the project increases and more feather requests come in. The Feather Distribution Project needs molted feathers of any type from parrots and macaws native to Latin America. It can also accept feathers cut during routine wing trims. In addition, the tail feathers from African Grey parrots (used as a substitute for the more difficult to obtain Northern Cardinal feathers) and the body contour feathers from white cockatoos (used as filler feathers in some pieces) can be used. The project also accepts cockatoo tail feathers, which are used for Native American Church fans. Feathers of all kinds from wild turkeys are also needed.

If you are interested in donating feathers or making a monetary donation to support the project, please contact Dr. Jonathan Reyman at (215) 785-0069 or reyman@museum.state.il.us. For more information about the project, please visit www.wingwise.com and click on "The Feather Project." As a bird keeper or a bird owner, you can make a significant contribution to the conservation of wild parrot and macaw populations, and can enable the Pueblos to maintain traditions that pre-date Columbus by many hundreds of years.

Are You Moving?

Make sure to notify AAZK National of your change of address. Don't miss a single *AKF* issue! Call: 1-800-242-4519 (US) or 1-800-468-1966 (Canada) or you can email change of address information to: aazkoffice@zk.kscoxmail.com<

Institutions wishing to advertise employment opportunities are asked to send pertinent data by the ***10th of each month*** *to: Opportunity Knocks/AKF, 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054. Please include closing date for positions available, and when setting these dates keep in mind that because of bulk-mail, most readers do not receive their AKF until the middle of the month or later. There is no charge for this service and fax or e-mail listings of positions which become available close to deadline are accepted. Our Fax is (785) 273-1980; e-mail: akfeditor@zk.kscoxmail.com< Listing must be sent as MS Word attachment. To post a position on the AAZK website, have listing to email address above by the 25th of the month for posting on the first day of the following month. We are no longer located at the Topeka Zoo, so please note new address to avoid delays in processing.*

Trainer II – Downtown Aquarium, Houston, TX
Qualified applicants should apply M – F, 9:00 a.m – 5:00 p.m., at the Downtown Aquarium Human Resources Office, 410 Bagby Street, Houston, TX, 77002, or e-mail lalcantar@ldry.com. EOE. The Aquarium restaurant located in Downtown Houston is seeking full-time Trainer II. The Aquarium includes a 500,000-gallon facility of aquatic exhibits and over 1,000 fish, birds, reptiles, amphibians, mammals and invertebrates represented in a collection of several hundred species. **Responsibilities:** Daily duties for this position include but are not limited to daily husbandry for tigers and the avian collection; presenting live animal demonstrations; training behaviors for medical, husbandry and education; creating and implementing behavioral and environmental enrichment. **Requirements:** Must be organized and self-motivated, with desire to see completion of projects. Certified S.C.U.B.A. diver preferable or willing to learn to dive. Must have valid drivers license. Must be self-motivated, with high desire to provide the best care available to animals. Must be observant and able to keep detailed electronic records. Must be able to work in a team environment or independently. Must have two (2) years prior experience, preferred large carnivore or flighted bird experience. A degree in Zoology or related field is preferred, but experience with exotic animal husbandry may be considered. Must be available to work weekends and holidays. Our exciting entertainment complex offers great health and dental benefits, super employee discounts on food and retail at all of our locations, and two weeks paid vacation, with one week available after six (6) months.

Zoo Keeper - Jackson Zoological Park, Jackson, MS
Apply by mailing resumé to Jackson Zoo, 2918 West Capitol Street, Jackson, Mississippi 39209 attn: Curator; or by filling out an application at the Jackson Zoo; or by emailing to info@jacksonzoo.org with Keeper Position in the subject line. Interviews by appointment only. EOE. Three positions available immediately. Full-time, hourly rate based on experience. Reports to Lead Keeper. **Responsibilities:** This is a full-time entry-level position in caring for the animals and facilities in selected areas of the zoo. Involves skilled work in the care of a varied animal collection and the maintenance of sanitary conditions of buildings, grounds and enclosures. Checks diets and prepared foods prior to distributing them to the animal collection. Work is performed in accordance to a schedule and direction provided by a lead keeper. This is also a highly visible public position. **Special Skills, Knowledge and Abilities:** Ability and/or knowledge of the care and feeding of animals. Prior zoo experience a plus. Ability to deal tactfully with the general public and large groups of children. Ability to maintain effective working relations with co-workers in a team environment. Able to lift 50 pounds. Sufficient manual dexterity to develop needed work skills to handle tools and equipment used in routine work duty. Willingness to work flexible hours including weekends and holidays. **Education and Training:** Must have high school diploma or G.E.D.

Aquarists -The Natural History Museum of the Adirondacks, Tupper Lake, NY
To apply, please send your letter and resumé to: Personnel Department, NHMA, PO Box 897, Tupper Lake, NY, 12986 Fax: 518-359-3253. Electronic files (preferred) may be sent to: careers@wildcenter.org Full time, benefited. ***Estimated Date of Hire: April 2006. Application deadline March 31, 2006.*** The Natural History Museum of the Adirondacks is an Equal Opportunity Employer Summary: The Natural History Museum of the Adirondacks, AKA the Wild Center, is seeking two innovative and experienced Aquarists to care for a diverse collection of native animals and plants, in the heart of a six-million-acre state park in upstate New York. The living collection includes North American River Otters, waterfowl, reptiles, amphibians, fish (primarily trout) and aquatic insects; contained in 50,000 gallons of water. Raptors, small mammals, snakes, and insects will also be displayed in this new museum that will open in July 2006. **Essential Duties and Responsibilities**: Feeding; Culture of both display animals and food organisms; Life support system operation and maintenance; Water quality testing; Maintaining exhibit aesthetics; Interpretation/public programs including public speaking and direct interaction with museum guests; Collection and transportation of specimens; Quarantine/disease recognition and control; Administering treatments/medications under the direction of the Curator and Veterinarian; and Record keeping. **Tasks Prior to Opening in Summer 2006:** Work with staff and others to support the work of exhibition and building contractors, fabricators to prepare the museum for opening season.Assist with managing independent contractors as needed. **Supervisory Responsibilities**:Supervises and trains seasonal interns and volunteers as assigned. **Qualifications:** Two (2) years of paid animal husbandry experience in a zoo, aquarium or science museum; Experience with live food culturing; Experience in the collection, (simple gear - seine nets and dip nets) transport, and quarantine of temperate fish and invertebrates for a public aquarium, museum or science center; Experience with Raptors and/or rehabilitation of wildlife is desired and; Basic carpentry, plumbing,

and electrical skills are useful. **Education and/or Experience:**A degree in Zoology, Biology or related field is preferred, but extensive experience with animal husbandry may be considered. **Physical Demands:** Requires some outdoor work. Must be able to lift 50 pounds.

Full-time Warden - Six Flags Great Adventure Wild Animal Safari Park, Jackson, NJ
Interested candidates should submit a resumé to: Karol Kempke, Human Resource Manager, P.O .Box 120, Jackson, NJ 08527. **Resumes being accepted until 10/31/05.** We are seeking applications for a full-time Safari Park Warden. The Safari Park consists of 1200 animals including birds, reptiles and mammals. **Responsibilities:** Applicants must have the ability to feed animals, clean houses, and general surroundings. **Requirements:** Applicants must have strength, ability and alertness to work with various species of animals within a Safari Park. Must be 18 years old, have valid driver's license, posses the ability to perform assigned duties in a safe & productive manner and be able to work in all types of weather conditions. Six Flags Great Adventure offers an excellent salary and benefits package. Six Flags is an "Equal Opportunity Employer"

Aviculture Interns Wanted - The Hawaii Endangered Bird Conservation Program at the Keauhou Bird Conservation Center (KBCC) on the Big Island of Hawaii and the Maui Bird Conservation Center (MBCC) on the island of Maui. For more information on internships at KBCC, please send a resumÈ, cover letter and the names and contacts of three (3) references to: Tracey Goltz P.O. Box 39 Volcano, HI 96785 or fax: 808-985-7034. For more information on internships at MBCC, please send this information to: Richard Switzer 2375 Olinda Road Makawao, HI 96768 or fax: 808-572- 3574. **Responsibilities**: Daily tasks include husbandry duties such as: diet preparation, aviary and facility maintenance, behavioral observations of breeding birds, grounds keeping, predator control. **Requirements**: Applicant must be able to live with several roommates in a remote area and should show enthusiasm for work with captive endangered Hawaiian birds. Applicant must have a valid driver's license and health insurance. Internships last for a 3-6 month period. Interns receive $20/ day stipend plus housing.

Big Cat Internships - Tiger Creek Wildlife Refuge, Tyler, TX
For more information or to download an Application Packet, see http://www.tigercreek.org/internships.html, no telephone calls please, all applicants must complete the Application Packet process for consideration of program participation. The Big Cat Internship as seen on Animal Planet involves Animal Care Apprenticeship and Public Educational presentations involving Big Cats This is a 90-day position (by 4 quarters/terms) allowing one to gain experience in the zoological field. **Responsibilities**: Job duties include cleaning, diet preparation, light maintenance, educational tours, etc. Interns are responsible for the daily cleaning and health monitoring of a large number of exotic feline species including but not limited to tigers, lions, leopards and pumas. Big Cat Internship opportunities also include working in environmental education with schools and youth groups in a variety of learning activities. Interns will present short guided lessons on animal care techniques, conservation and rescue methods, backgrounds on the big cats and much more. This wide variety of teaching opportunities and educational training provides the intern with an exciting array of new skills and experiences. Training is provided by the staff. **Requirements**: At least two (2) years of undergraduate college work in wildlife management, education, biology, or related field. If no college experience then two (2) years of verifiable work experience in unrelated field or one (1) year of work experience in animal care field. All applicants must be at least 20 years of age by start date. These positions require motivated persons with a career focus in biology/ zoology/wildlife management. Housing is provided for these non-paying positions. Interns provide a strong commitment to the refuge, with a six- day work week and light duties on Sundays.

Environmental Interpretation and Wildlife Care Internship - Trailside Museums and Wildlife Center, Bear Mountain State Park, Bear Mountain, NY 10911-0427. Contact: Jennifer Verstraete at (914) 786-2701 ext. 278 or 265; email - elayne.keith-feller@oprhp.state.ny.us. Start Dates: Summer internship mid-May through mid-August; Fall internship late-August/early September through early November. Internship is unpaid, but provides knowledge and experience; written evaluation gladly given. Possible course credit if intern can arrange it. Interns will work at least three (3) days a week, including one weekend day. No housing available. We reimburse full payment for required pre-exposure rabies series. **Qualifications**: Enthusiasm, comfortable handling animals, motivated to learn. Must be 18 or older; preference given to college student looking for experience in the care of wildlife and in environmental interpretation. **Responsibilities**: 1) Provide care for permanently injured or orphaned park wildlife (mammals, birds, fish, amphibians and reptiles) in zoo setting. Under the supervision of a Senior Zookeeper will prepare food and diets, maintain enclosures and exhibits, and provide enrichment; 2) Interact with the public answering questions, interpreting exhibits, possibly developing and offering short interpretive talks.

Internship - (Tigers For Tomorrow Exotic Animal Preserve) Fort Pierce, FL .
To apply send cover letter and resumé to: Susan Steffens/ Executive Director- Tigers For Tomorrow, 18905 Orange Ave, Ft. Pierce, Fl or email to Sue@tigersfortomorrow.org. This non profit organization is seeking two (2) possibly three (3) student interns for the 2005 fall season. Tigers For Tomorrow is a last stop exotic animal rescue preserve that houses and specialize in big cats. The preserve is in the beginning stages of moving to a new facility, interns will assist management in the move and care of the animals. **Responsibilities**: The intern will assist in the daily husbandry of preserve residents, assist in interpretive talks, work with the public. **Requirements**: Desirable qualifications include the ability to communicate effectively with people, writing skills, orientation to details, and be a self- motivator. Benefits include room and board, and $50.00 a week. Personnel transportation is required.

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The Journal of the American
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FEBRUARY 2006

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1974 - 2004

About the Cover.....

This month's cover features a Steller's Sea Lion (Eumetopias jubatus) drawn byElena Chelysheva, a former Curator of Mammals at the Moscow Zoo in Russia. The variety of sea lions which live at Sea Lion Caves is commonly called the Northern, or Steller, sea lion. This sea lion is named after George Wilhelm Steller, an eminent German naturalist who accompanied the Russian explorer Vitus Bering in 1741 on his second Alaskan expedition. Steller was the first qualified observer to study and classify these animals. The Steller sea lion is a member of the Otariidae family, or eared seal. It is characterized by an external ear which can be closed when entering water and by hind feet or flippers that point forward. In contrast, Phocidae, or true seal, has no external ears and its rear flippers point backward. Also belonging to the Otariidae family is the California sea lion and the Alaska fur seal. This animal is also considered non-migratory because there is no mass movement to summer or winter grounds, although individuals or small groups may travel hundreds of miles in search of food. It is found from the central California coast, north to the Bering Sea and back south into northern Japanese waters. A recent U.S. Fish and Wildlife Survey indicates a possible total population of nearly 80,000 Steller sea lions. Most of these animals live on the offshore islands and rocks of British Columbia and Alaska. Some Stellers live along the California coast and about one thousand reside in Oregon Waters. The number of Steller sea lions in the Sea Lion Caves area varies from season to season and from year to year with the herd averaging about 200 animals. Avwerage lifespan is around 20 years. Thanks, Elena!

Animal Keepers' Forum publishes original papers and news items of interest to the animal keeping profession. Non-members are welcome to submit articles for consideration. Articles should be typed or hand-printed and double-spaced. Authors are encouraged to submit their manuscripts on a disk as well as in hard copy form. Manuscripts submitted either on disk or electronically as attachments to an email should be submitted in Microsoft WORD. All illustrations, graphs, charts and tables should be clearly marked, in final form and should fit in a page size **no greater than** 5.5" x 8.5" (14cm x 22cm). Literature used should be cited in the text (Brown, 1986) and alphabetically in the final bibliography. Avoid footnotes. Include scientific name (as per ISIS) the first time an animal name is used. Thereafter use common name. Use metric system for weights and measurements (standard equivalents may be noted in parenthesis). Use the continental dating system (day-month-year). Times should be listed as per the 24-hour clock (0800, 1630 hrs. etc.). Glossy black and white **or** color prints (minimum size 3" x 5" [8cm x 14cm]) are accepted. Clearly marked captions should accompany photos. Please list photo credit on back of photo. Photographs may be submitted electronically as either JPEG or TIFF file attachments.

Articles sent to *Animal Keepers' Forum* will be reviewed by the editorial staff for publication. Articles of a research or technical nature will be submitted to one or more of the zoo professionals who serve as referees for *AKF*. No commitment is made to the author, but an effort will be made to publish articles as soon as possible. Lengthy articles may be separated into monthly installments at the discretion of the editor. The editor reserves the right to edit material without consultation unless approval is requested in writing by the author. Materials submitted will not be returned unless accompanied by a stamped, self-addressed, appropriately-sized envelope. Telephone, fax or email contributions of late-breaking news or last-minute insertions are accepted as space allows. Phone 1-800-242-4519 (US); 1-800-468-1966 (Canada); FAX (785) 273-1980; email is akfeditor@zk.kscoxmail.com<

Deadline for each regular issue is the 10th of the preceding month.
Dedicated issues may have separate deadline dates and will be noted by the editor.

Articles printed do not necessarily reflect the opinions of the *AKF* staff or the American Association of Zoo Keepers, Inc. Publication does not indicate endorsement by the Association.

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E-Mail Addresses: You may reach Barbara Manspeaker at AAZK Administrative Offices at: aazkoffice@zk.kscoxmail.com< You may reach Susan Chan and *Animal Keepers' Forum* at: akfeditor@zk.kscoxmail.com<

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Scoops & Scuttlebutt

Donations Support AAZK's Operation Budget

The AAZK Board of Directors and the AAZK Administrative staff wish to thank the Columbus Zoo AAZK Chapter for its generous donation of $1000.00 to assist the Association in meeting its ongoing expenses. We would also like to thank Contributing Member William H. Disher, a volunteer at the San Diego Zoo & Wild Animal Park, for his generous contribution of $100.00 to AAZK, Inc. Such donations help AAZK continue to pursue its goal of promoting excellence and professionalism in captive exotic animal care.

AAZK National Conference - Chapter Challenge 2006!

In our efforts to keep cost to the delegates to a minimum, the Lincoln Park AAZK Chapter will be participating in the Chapter Challenge. If your Chapter contributes $250.00 or more to support the 2006 National AAZK Conference, they will be entered into a drawing with the winning Chapter receiving one full registration and one double occupancy room for five nights at the Millennium Hotel (Sept. 15-19). Letters with more details will be mailed to all AAZK Chapters soon. Good luck and start planning to meet the Challenge!

PJC Offers Zoo Animal Technology Program

The Pensacola Junior College zoo animal technology program is now accepting applications for entry in August 2006. This is a two-year associate of science degree program offered as a cooperative effort of PJC and The Northwest Florida Zoological Park and Botanical Gardens in Gulf Breeze FL. Our program includes general education, a comprehensive series of academic courses in animal biology, specialized zoo topic courses, and practical animal care, medical husbandry, and exhibit repairs skills courses. The degree articulates into the Zoo Science B.S. program at University of West Florida (also in Pensacola) if desired. Application packets may be obtained from the PJC biology department secretary at (850) 484-1168 or on the web at http://itech.pjc.edu/jkaplan/zooschool/ and further information is available by contacting Joyce Kaplan, PJC Zootech Director, at jkaplan@pjc.edu or (850) 484-1164.

Recharter Packets Due at AO by March 1st

All AAZK Chapters are reminded that 2006 Recharter Packets have been sent to each Chapter President at the address listed on last year's recharter form. Completed packets are due back at the AAZK Administrative Office no later than ***1 March 2006***. The late fee for 2006 is $150.00, so you are encouraged to make every effort to get your packets in by deadline. Be sure to fill out the packets completely, providing all of the requested information, including a copy of your 2005 closing bank statement. Completion of the recharter packets by all AAZK Chapters is an IRS requirement to allow AAZK, Inc. and its subsidiaries to operate under our nonprofit 501(c)(3) designation. If you have questions about filling out the packet, please contact Barbara Manspeaker at 1-800-242-4519 (U.S. or 1-800-468-1966 (Canada). Your cooperation and prompt response is greatly appreciated!

Have You Sent AO Your E-mail Address Yet?

In order to better communicate with our members, and also save the Association the rising costs of mailings/postage, we are working to establish an AAZK member e-mail database. With such a database we would be able to send out electronic membership renewal notices, information about upcoming conferences, and other Association news. In order to make this work, we need your help. Please send an e-mail to Barbara Manspeaker at aazkoffice@zk.kscoxmail.com with the words "AAZK Email Database" in the subject line. Please be assured that your e-mail address will not be shared with any other group or individual without your express permission. We are simply looking for ways to stay in touch with you as a member and to also help cut the costs of mailings and postage for the organization. Thanks in advance for helping us achieve this cost-cutting goal.

Coming Events

Animal Behavior Management Alliance Conference - 5-10 March, 2006 in San Diego, CA. Hosted by the Zoological Society of San Diego and Sea World/California. The theme is "Behavioral Buffet" and conference will include site visits, workshops, paper and poster presentations and a job fair. For more info on the ABMA and the conference log on to www.theabma.org<

AZA Eastern Regional Conference - 26 March - 1 April 2006 - hosted by the Jacksonville Zoo, Jacksonville, FL. See http://www.aza.org/ConfWork/AboutRegWork/#fut

Techniques for Butterfly Conservation and Management - 24-26 April, 2006 in Gainesville, FL. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

AZA Western Regional Conference - 24-29 April 2006 - hosted by Vancourver Aquarium in Vancouver, British Columbia. See http://www.aza.org/ConfWork/AboutRegWork/#fut

Second International Congress of Zookeeping (ICZ) 7-11 May 2006 in Gold Coast, Queensland, Australia. Visit website: http://www.iczoo.org< for latest information or send a blank e-mail to ICZ_News-subscribe@yahoogroups.com for regular updates on this event or contact Liz Romer at slromer@bigpond.com

Tenth Elephant Ultrasound and Veterinary Procedures Workshop - 17-20 May, 2006 at Riddle's Elephant and Wildlife Sanctuary, Greenbriar, AR.For more information, or a registration packet, please contact Dr. Schmitt, 217 Karls Hall, SMSU - AG. Dept., 901 South National Ave., Springfield, MO 65804 USA; phone (417) 836-5091; fax (417) 836-6979; email - dennisschmitt@missouristate.edu; or contact Riddle's Elephant and Wildlife Sanctuary, PO Box 715, Greenbrier, AR 72058 USA; phone (501) 589-3291; or fax (501) 589-2248; or email - www.elephantsanctuary.org<

Third Protected Contact Training and Enrichment Workshop - 24-28 May 2006. Hosted by Zoo Atlanta, Atlanta, GA. Presented by Active Environments. Instructors include Gail Laule, Margaret Whittaker, Alan Roocroft, David Sheperdson, Ph.D., and Mollie Bloomsmith, Ph.D. Workshop curriculum will focus on the fundamentals and practical application of protected contact as a comprehensive system for the management of captive elephants through classroom instruction, discussion, group activities, demonstrations, and hands-on training opportunities. Registration is limited to 25 participants. For further information contact: Active Environments, Inc., 7651 Santos Rd., Lompoc, CA 93436; Tel: 805-737-3700; Fax - 805-737-3705; email - active_environs@ix.netcom.com<

2006 International Gorilla Workshop - 23-26 June 2006 at Paignton Zoo, Devon, England. Paignton Zoo will be host. We would like to invite gorilla workers from all diciplines to register. Further information available at http://www.paigntonzoo.org.uk/gorillas/gorillaworkshop.htm

33rd AAZK National Conference – 15-20 September 2006. Hosted by the Lincoln Park Zoo AAZK Chapter and the Lincoln Park Zoo, Chicago, IL. See information at their website www.aazk2006.org<

Animal Training Seminar - 18-22 September, 2006 at Shedd Aquarium, Chicago, IL. Five-day seminar on training techniques with Ken Ramirez. For more info and questions, contact Renee Birk at rbirk@sheddaquarium.org or call (312) 692-3328. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

AZA Annual Conference - 25 - 30 September 2006. Hosted by Busch Gardens, Florida Aquarium, & Lowry Park Zoo, Tampa, FL. See information at their website http://www.aza.org/ConfWork/AboutAnnualConf/#fut

Managing Animal Enrichment and Training - 7-13 October, 2006 in Portland, OR. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

27th Elephant Managers Association Conference 15-18 October 2006,in Albuquerque, NM. Hosted by the Albuquerque Biological Park. Pre-conference trips are to the International Balloon Fiesta, 14-15 Oct; post conference trip to Santa Fe and up the tram to the crest of the Sandia Mountains. For more information see www.elephant-managers.com , or call Lynn Tupa at 505-764-6216 or Gwen Dragoo at 505-764-6264.

Post Your Coming Events Here - email to:

akfeditor@zk.kscoxmail.com

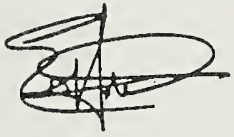
From the Executive Director

I would like to take this opportunity to thank the delegates, AAZK Chapters and zoo or aquarium facilities that responded to the refund program offered to the delegates who were affected by the cancellation of the AAZK National Conference in New Orleans as a result of Hurricane Katrina.

At the writing of this message, 181 of the 232 delegates have responded to the offer of a full or partial refund. Delegates were given the opportunity to donate all or partial amounts of the registration fee to the Katrina Relief Fund and AAZK. Over 75% of the delegates, Chapters and facilities responded with a full or partial donation. As a result over $10,000 from the AAZK conference delegates has been donated to the Katrina relief effort.

In mid-December, $7,500 was forwarded to the Audubon AAZK Chapter for distribution to needy Chapter members, former Chapter members and staff of the Audubon facilities who needed help with repairs, materials, medical expenses, or simply holiday presents for children of families struggling to return to a normal life in New Orleans.

Thanks to all who participated in the delegate donations, and to the individuals, Chapters and facilities who contributed to the AAZK Katrina Relief effort. Your donations are gratefully appreciated. The AAZK Chapter members and former members of the Audubon Park facilities hope to reunite in Chicago, and they look forward to seeing you at the 2006 National AAZK Conference hosted by the Lincoln Park Chapter.



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Just a reminder that if you regularly (or even occasionally) purchase items on *amazon.com*, there is a way you can also help out the Association while you are doing your shopping. If you go to *amazon.com* from the AAZK Home Page (www.aazk.org), the Association will receive 5% of the cost of your purchase. The *amazon.com* icon is at the bottom right of the AAZK Home Page. And the percentage from purchase of goods is on all items you purchase there - books, music, etc. So next time you want to do a little online shopping at *amazon.com*, get there through the AAZK website and help out your professional organization.

AAZK Award Nominations Are Now Being Accepted for 2006

The AAZK Awards Committee is accepting nominations for the **Jean M. Hromadka Excellence in Zookeeping Award (EZ)** **The Certificate of Merit for Zoo Keeper Education (CMZE)**, and **The Certificate of Excellence in Exhibit Renovation (CEER)** to be presented at the 2006 AAZK Conference in Chicago, IL. The deadline for all award nominations is **1 June 2006**. Information concerning the qualifications, nomination procedure, selection procedure and an explanation of the awards may be obtained by contacting Janet McCoy, Chair, AAZK Awards Committee, Oregon Zoo, 4001 S.W. Canyon Rd., Portland, OR 97221; email - mccoyj@metro.dst.or.us

Jean M. Hromadka AAZK Excellence in Zookeeping (EZ) Award

The American Association of Zoo Keepers, Inc. (AAZK) is the administering organization of the Jean M. Hromadka Excellence in Zookeeping Award presented by the AAZK Awards Committee. The purpose of the award is to recognize achievement and determination of an individual in the zookeeping field and in fostering professionalism. Zookeeping is a science combining zoology, biology, animal management, behavioral observation and daily record keeping on the collection of species in their care. This is essential knowledge for maintaining a species effectively in captivity. The excellent zookeeper must excel in one or more of these areas, but not be lacking in any of them.

The Excellence in Zookeeping Award was founded by John Siegel, 1974-1975 CHAIR, in 1974. The original name of the award was the Marlin Perkins Award, named after the famed zoologist who started his career as a zookeeper. The name was changed in 1978 to the EZ award. In 1990, the name was changed to the Jean M. Hromadka Excellence in Zookeeping Award in memory of her outstanding contributions to the furtherance of AAZK through committee work and as President. The award is presented at the annual AAZK National Conference.

Qualifications:

1. The nominee **must** be a full-time animal keeper, employed in any North American zoological institution, aquarium or related facility for at least five (5) years.
2. The nominee **must** have been employed at least two (2) years on permanent status at the same zoo, aquarium or related facility.
3. The nominee **must** be nominated by his or her peers who have also been employed at that same zoo, aquarium or related facility. Supporting nominations may be submitted by management personnel from the same institution.

Nomination Procedure:

1. List name, position, institution's name, address, phone and Director, years of service in the field and the recommendation of peers or colleagues.
2. List and **document** commitment to the profession, outstanding achievements, practical/outstanding application of knowledge and experience, and keeper skills, etc. **Verification** of these facts must be signed by the zoo director, curator, or immediate supervisor of the individual being nominated.
3. List any extra activities outside of zoo, aquarium or related facility work: working with conservation groups, youth, wildlife officials, etc.
4. Deadline for nominations is **JUNE 1st** of each year.

Selection Procedure:

The Awards Committee, consisting of five (5) keepers, will independently review each nominee.

Certificate of Merit for Zookeeper Education (CMZE)

The American Association of Zoo Keepers, Inc. (AAZK) is the administering organization of the Certificate of Merit for Zookeeper Education (CMZE) presented by the AAZK Awards Committee. The purpose of the award is to recognize individuals, institutions and organizations in the zoological community most actively promoting educational programs for zookeepers. Examples of such support are: reimbursements for formal education, keeper training courses and staff seminars.

The CMZE was founded by Jeff Roberts, 1976-1978 CHAIR, in 1978, to compliment the work of the AAZK Education Committee that had been formed at that time. The award is presented at the annual AAZK National Conference.

Qualifications:

1. Any staff individual, institution or organization from a North American zoo, aquarium or related facility is eligible.
2. The keeper training program must have been in existance for at least one (1) year.

Nomination Procedure:

1. If you feel that your institution, organization or a staff individual merits such an award, please submit a letter of nomination which mentions specifically the educational programs that are offered.
2. Claims made should be backed up with documentation for the committee to review.
3. List the institution or organization's name, address, phone and Director.
4. The deadline for nominations is JUNE 1st of each year.

Selection Procedure: The Awards Committee, consisting of five (5) keepers, will independently review each nominee.

Certificate of Excellence in Exhibit Design Renovation (CEER)

The American Association of Zoo Keepers, Inc. (AAZK) is the administering organization of the Certificate of Excellence in Exhibit Renovation (CEER) presented by the AAZK Awards Committee. The purpose of the award is to recognize institutions or organizations in the zoological community for the design and renovation of existing animal facilities which involved active keeper participation in the process.

The CEER was established by Janet McCoy, 1990 CHAIR. Bill Whittaker proposed the award to the AAZK Board of Directors. The award is presented at the annual AAZK National Conference.

Qualifications:

1. Any North American zoological institution or organization is eligible.
2. The renovated exhibit must be in full operation for at least two (2) years.
3. The exhibit must be nominated by a keeper at that same institution or organization. Supporting nominations may be submitted by management personnel from the same institution.

Nomination Procedure:

1. List institution or organization's name, address, phone and Director.
2. **Document** local awards or commendations for exhibit, drawings, 8 X 10 color photos - no slides (2 before and 8 after), and renovated exhibit type: single or multispecies, and size.
3. **Document** keeper participation in the design and why the existing facility was renovated.
4. **Document** interface with other zoo divisions; and maintenance of exhibit after completion.
5. The deadline for nominations is **JUNE 1st** of each year.

NOTE: Materials will not be returned.

Selection Procedure: The Awards Committee, consisting of five (5) keepers, will independently review each nominee.

Nominee Evaluation:
The evaluation of each nomination is broken down into four categories based on the general guidelines outlined for the award. The four categories are: Keeper Involvement, Exhibit Functionality, Exhibit Management and Visitor Point of View/ Other Information. Items the committee is looking for are the following:

A. **KEEPER INVOLVEMENT:**
- a) degree of keeper involvement with conceptual development of exhibit
- b) degree of keeper involvement with facilitation of completion of exhibit, (fundraising, promotion, assist with construction)
- c) contribution to educational experience (graphics, conservation message)
- d) originality - is it something new and different, or has it been tried before?

B. **EXHIBIT FUNCTIONALITY:**
- a) versatility - indoor/outdoor, four seasons, protection from elements
- b) accommodates and encourages animal's natural behavior - climbing structures, land area, height, water
- c) hard (gunite, concrete) vs soft (grass, dirt) environments - as to animal needs
- d) sight lines valuable to animal as well as visitor - important to some animals (polar bear, chimps)
- e) physical and visual barriers for animal's use, animal safety
- f) flexible entrance/exits (hoofstock - more than one entrance)
- g) ability to exhibit natural social grouping
- h) breeding success

C. **EXHIBIT MANAGEMENT:**
- a) how management of exhibit interfaces with other zoo divisions (grounds, maintenance - simple repair, paint)
- b) keeper serviceability, overall maintenance of exhibit and surroundings
- c) adequate drains and properly located
- d) quality and versatily of holding areas - ease of separating animals, moving, breeding, sick

e) keeper sight lines - can you see animal when they come into holding or when shifting them between areas, keeper safety
f) ease of providing time change items (browse, logs, feed, novel objects)
g) environmental control (ease of seasonal adjustments - ventilation, heat)

D. **VISITOR POINT OF VIEW/OTHER INFORMATION:**
a) educational experience (conservation message)
b) immediate and sustained viewer interest
c) sight lines - not see doors, drains, fencing - does it have esthetics
d) bonus point - local awards, commendation, "wow" factor
e) include anything else pertinent to the renovated exhibit that you think is important

The character of the awards includes either a plaque or certificate, letter of notification to the institution's director and national recognition by professional journals. Such journals include: the American Zoo and Aquarium Association (AZA) and the Canadian Association of Zoological Parks and Aquarium (CAZA) Newsletters, *Animal Keepers' Forum* (AAZK), Awards, Honors and Prizes: Volume 1; United States and Canada. The latter is published by Gale Research Company based in Wheaton, MD and found in medium to large sized libraries across the U.S. and Canada.

Award Nominations should be submitted to:

Janet McCoy, Awards Chair

The Oregon Zoo, 4001 SW Canyon Road, Portland, OR 97221

Next month we will include information on making nominations for the Lifetime Achievement Award, the Meritorious Achievement Award, and the Lee Houts Environmental Enrichment (LHEE) Award

Deadline for Nominations is 1 June 2006

MOVING?

Please let us know when you change your address! It now costs AAZK 99 cents every time an *AKF* is returned because of an incorrect address. Call 1-800-242-4519 (U.S.) or 1-800-468-1966 (Canada) . If you should get the answering machine, please speak slowly and clearly when giving an address change. Or you may e-mail address changes to: aazkoffice@zk.kscoxmail.com

THANKS !

Bowling for Rhinos 2006

(Feel free to photocopy this form to submit to Patty Pearthree)

It's time to start planning for "Bowling For Rhinos 2006". Please send in your information ASAP. Remember, if you want to be eligible to win any of the trips being offered, all money must be sent to Patty Pearthree ***by 1 September 2006***, and you **must** be a national AAZK member in good standing to qualify. If bowling isn't your thing, try "Rock'n for Rhinos", "Run For Rhinos" or send a Chapter or individual donation. Every penny counts toward saving rhinos worldwide! Questions? (919) 678-0449 or ppear3@pear3.org website: http://aazkbfr.org

Please Print Clearly

Contact person:_____

Zoo/Organization:_____

Address:_____

City:_____ **State/Province:**_____ **Zip/Postal Code:**_____

Phone:

Day - _____ **Night -** _____

Fax:_____ **Email:**_____

Will you be hosting a Bowling for Rhinos Event this year?

YES **NO**

When? _____

Where?_____

How many Sponsor Forms do you anticipate needing? _____

Would you like sample letters/flyers/posters? **YES** **NO**

Mail to: *Patty Pearthree*
c/o Bowling for Rhinos
318 Montibello Dr.
Cary, NC 27513

Questions? **(919) 678-0449** **ppear3@pear3.org** **website: http://aazkbfr.org**

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In the Classification Kingdom, Only the Fittest Survive

Carolus Linnaeus, the 18th-century botanist and father of scientific naming, enjoyed the unusual status of international scientific hero. Celebrated as the creator of a classification system that brought order to the flood of new species being discovered, Linnaeus was revered in his native Sweden and was so widely admired across Europe that he became one of the most frequently painted figures of the 1700s. In fact, the triumph of the Linnaean method, which uses kingdoms of life and two-part Latin names for species, was so complete that it seemed he had forever solved the problem of cataloging the world's living things.

So Linnaeus would most likely be shocked — after guessing there were fewer than 15,000 species of animals and plants on earth — to learn that more than 200 years later, scientists are far from finishing the naming of living things and are once again being overwhelmed by an explosion of new species and names. Between 1.5 million and 2 million species have been named, and a deluge of what could be millions more appears imminent.

As a result, scientists have once again been seized by 18th-century paroxysms of fear that the field of classification could descend into chaos with precious information lost. For while the Linnaean method for organizing life is still followed and has held up well, no one oversees what has become the rapid and sometimes haphazard proliferation of species names.

Enter ZooBank, a web-based register to compile the scientific names of all animal species. Proposed recently in the journal Nature by the International Commission on Zoological Nomenclature, a group of scientists in charge of the standard code of rules for animals, ZooBank is the latest entry in a growing field of contenders eager to use the Internet to take on the task of overseeing the naming of life and step into the limelight as the next Linnaeus.

Andrew Polaszek, the executive secretary of the Commission and lead author of the paper in Nature, says one goal of ZooBank is to create a complete list of the scientific names for animals, a basic necessity for scientists that, surprisingly, does not yet exist.

Given that scientists have often given preferential treatment to animals over plants, it should come as no surprise that there is no complete database for all scientific plant names. Don't even bother to ask about other major groups like fungi or the protists (a group including slime molds and amoebas). Only the lowly bacteria can claim a complete inventory. The numbers of species and specialists in the field were few enough in 1980 that the scientists could obliterate all names not on their single approved list and refuse to accept new names except those published in a certain journal.

A major reason that no one has kept track of all the species names is the surprising Wild West sort of freedom that allows names to spring up pretty much anywhere. Let's say a person discovers what she believes is a new species. If she publishes a description of the organism with her newly created name for it, by the internationally accepted rules of science, the name officially stands. But while she might publish in a carefully peer-reviewed scientific journal, she might also publish it, as Dr. Polaszek lamented, "in the little local journal that your neighbor produces in his garage." But while scientists agree that the proliferation is out of control, there is no consensus on who should be in control. And every new initiative has a different flavor and agenda.

ZooBank proposes serving not only as a list keeper but also as gatekeeper, becoming the only official registry of animal names and mandating that all animal names receive ZooBank approval before being considered legitimate, ensuring that all animal names follow the rules of the nomenclature commission's Code.

Source: NEWS RELEASE, The Center for North American Herpetology, Lawrence, KS http://www.cnah.org 21 Oct. 2005 from original by Carol Kaesuk Yoon, New York Times, modified.

Fruit Bats May Carry Ebola Virus

Fruit bats may be acting as reservoirs of the killer Ebola virus, responsible for several deadly outbreaks in central Africa, research suggests. Three bat species captured during outbreaks between 2001 and 2003 in Gabon and the Republic of Congo show evidence of symptomless infection.

Writing in *Nature*, researchers in Gabon say this means the animals may play a key role in spreading the virus. They say local residents should be encouraged to refrain from eating bats.

The first human outbreak of Ebola was recorded in 1976, but scientists have still to pin down which species harbor the virus. If bats are among the culprits, they are more likely to pass the virus on to great apes such as gorillas and chimpanzees, which have been badly affected. Death rates from Ebola among the great apes tends to increase during dry seasons, when food is scare in the forest, and animals are more likely to come into contact with other species as they compete with food. Immune function in bats is also known to change during these dry periods, providing the virus with more favourable conditions in which to reproduce.

Researchers from the Centre International de Recherches Medicales de Franceville trapped and tested more than 1,000 small animals in Ebola-affected areas. They found fruit bats of three species - *Hypsignathus monstrosus, Epomops franqueti* and *Myonycteris torquata* - had either genetic sequences from the virus or evidence of an immune response to it. Each of the three species has a broad geographical range that includes regions of Africa where human Ebola outbreaks occur. Traces of the virus were found in the animals' liver and spleen - two organs specifically targeted by Ebola.

Source: BBC News Online 12/1/05

Check Out the Insert to Get Your New AAZK Logo Apparel

Be sure to check out the insert in this issue of the *Forum* for information and an order form for the new AAZK logo T-shirts.

Plan to Wear Your AAZK pride in 2006!

AAZK Announces New Members

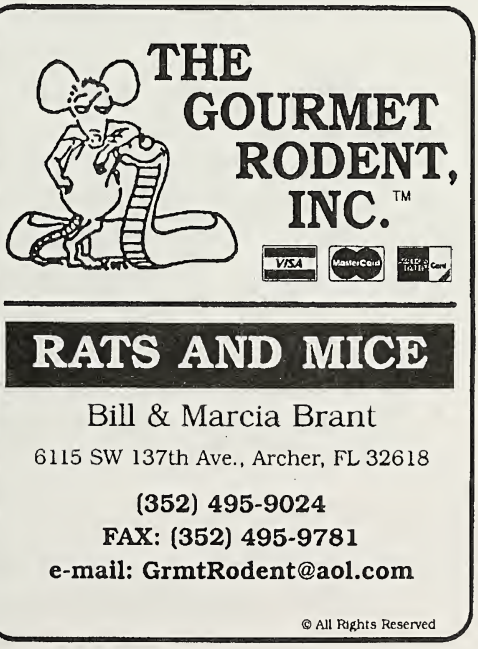
Rory Hyde, **Cape May Co. Park & Zoo (NJ)**; Albert Olsen, **Maryland Zoo in Baltimore (MD)**; Bethany Farrey, **Disney's Animal Kingdom, (FL)**; Jennifer Loveless, **Palm Beach Zoo at Dreher Park (FL)**; Frances Russell, **The Mobile Zoo, Inc. (AL)**; Bethany Hetsel, **Nashville Zoo at Grassmere (TN)**; Michelle Loney, **Ft. Wayne's Children's Zoo (IN)**; Jennifer Berry, **no zoo listed (Lafayette, IN)**; Jackie Deak and Amanda J. Hall, **Scovill Zoo (IL)**; Andrea Kendrick, **Dickerson Park Zoo (MO)**; Sara Schmidt, **Brec's Baton Rouge Zoo (LA)**; Tina Slagle, **Ft. Worth Zoo (TX)**; Anna Richards, **Houston Zoo (TX)**; Noelle Adams, **Wildlife Rescue & Rehabilitation (TX)**; Angela Sanders, **Capital of Texas Zoo (TX)**; and Melissa McCartney, **Oakland Zoo (CA)**.

Renewing Institutional Members

Tautphaus Park Zoo

Idaho Falls, ID

William R. Gersonde, Superintendent



Chicago—My Kind of Town for the Zoovolution AAZK '06 National Conference

The City of Chicago, the Millennium Knickerbocker Hotel, and the AAZK Chapter at Lincoln Park Zoo are opening their doors and arms to zoo keepers from across the nation this fall, 2006!

Friday, September 15 - **Wednesday**, September 20, 2006

First Call for Papers is now! Since the theme is Zoovolution, the first priority for papers will be given to those that incorporate advances in the zoo field, whether in husbandry, conservation, exhibitry, or other advances. This conference is themed to show how many advances we have made so far in the profession of zookeeping, and give everyone an idea of the advances they can make in their own zoos!

First Call for Papers Deadline:

Abstracts due **March 15, 2006**. Please send all abstracts along with your contact information to:

Michael Brown-Palsgrove
Lincoln Park Zoo
PO Box 14903
Chicago, IL 60614

Abstracts must include your name, title, institution, and contact information
If you have any questions, please call Lisa Scanlon at 312-742-7748.

For more information on the AAZK National Conference 2006 presented by Lincoln Park Zoo AAZK Committee, please take a look at our website http://aazk2006.org/

"It's 106 miles to Chicago, we've got a full tank of gas, half a pack of cigarettes, it's dark outside, and we're wearing sunglasses." "Hit it."
—Jake and Elwood Blues

2006 AAZK National Conference

We look forward to seeing many zoo professionals during the 33rd annual AAZK National Conference. The conference begins the evening of Friday, Sept. 15th with the official icebreaker. Everyone will check out of the magnificent Millennium Knickerbocker on Wednesday, Sept. 20th.

Registration is $175.00 for the entire five-day event. Hotel rooms are $175 (double occupancy) and $185 (quadruple occupancy) per night. Please continue to see our web site at www.aazk2006.org or contact us at aazk@lpzoo.org or 312-742-7749.

The 2006 Conference is named "Zoovolution." Since Lincoln Park Zoo (our hosting facility) was one of the first zoos in the U.S.—opening in 1868—we wanted to exhibit, discuss and reflect on how our industry has evolved over the last 138 years. Please join us for on a five-day journey through decades of ever-changing animal husbandry.

Think of what "Zoovolution" means to you. How have your facility, animal care, training and enrichment activities evolved? Would you like to share this information with your peers? Consider presenting a paper or poster.

The Lincoln Park AAZK Chapter has started a movement—*Zoo Keepers on Tour*—to raise funds and awareness for the 2006 AAZK National Conference. We will continue to spread our message (and beg for money) to all that seem interested in supporting your visit to Chicago.

Hurricane Katrina crippled the 2005 AAZK National Conference, but with the continued generosity of the New Orleans AAZK Chapter we are committed to making 2006 truly memorable.

Have you purchased your *LIVE WILD* Paw Magnet yet? Help support the 2006 National AAZK Conference and *Zookeepers on Tour* by proudly displaying your Paw Magnet on your car, your locker, filing cabinet, etc.!

To order see www.aazk2006.org

So You Want To Be A Zookeeper? Food, Fun, and Feces at the Zoo

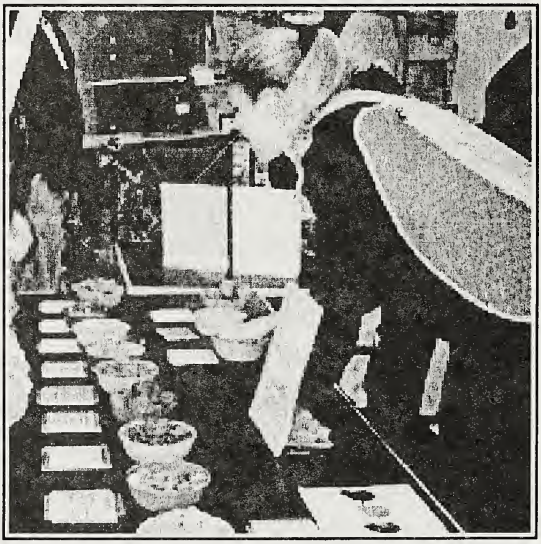
By Erica Peth, Keeper
Birmingham Zoo, Birmingham, AL

Every year, Birmingham Zoo's Halloween event *Boo at the Zoo* grows and improves. This year keepers were asked by the organizing committee to take part in an educational experience for trick or treaters. The keepers took on this challenge and succeeded in altering the standard trick or treating experience by slipping in some education in a fun and spooky way. Zoo staff collaborated to transform our Zoo Education Classroom into an interactive zookeeping experience. Keepers decided to highlight three important aspects of our profession: food, fun, and feces.

At the entrance to the room was a sign "So You Want to be a Zookeeper? Food, Fun, and Feces." This definitely caught everyone's attention. For two of the four nights of *Boo at the Zoo*, the large crowds lining up to enter the room were kept entertained with a "Fear Factor" interactive. Maintenance Crew teamed up with Horticulture Staff to craft a live insect device: a 4'x4'x2' painted plywood box was filled with about 20 Madagascar hissing cockroaches and 500 crickets. The box was 4' off the ground and had an area enclosed with plexiglass in the center large enough for three or more children to view the creepy crawlies at the same time. The box was equipped with a light that could be manually flipped on and off to scare appropriately.

For the other two nights of *Boo at the Zoo*, guests had a brief lesson on animal training before entering the room. They were trick or treated by targeting a requested body part to a target pole held by a keeper to earn a reward. As they successfully targeted, the keeper gave out tootsie rolls, a reward in theme with what would be encountered later on. It was very gratifying when children came back to be trained multiple times. Some children specifically requested what body part they wanted to target, which zoo animals often do in offering behaviors before they are cued.

Once in the room, the first set of tables presented "Food." Different chows and biscuits in bowls were displayed that could be touched and smelled. Live insects, plastic rats, and mice were included. Everything was labeled and had a short description of the types of animals that eat the particular foods. A keeper stood behind the table explaining the samples and answering questions. A bag of biscuits and a hay bale were available for guests to try and lift to see if they could handle the lifting required by a keeper.

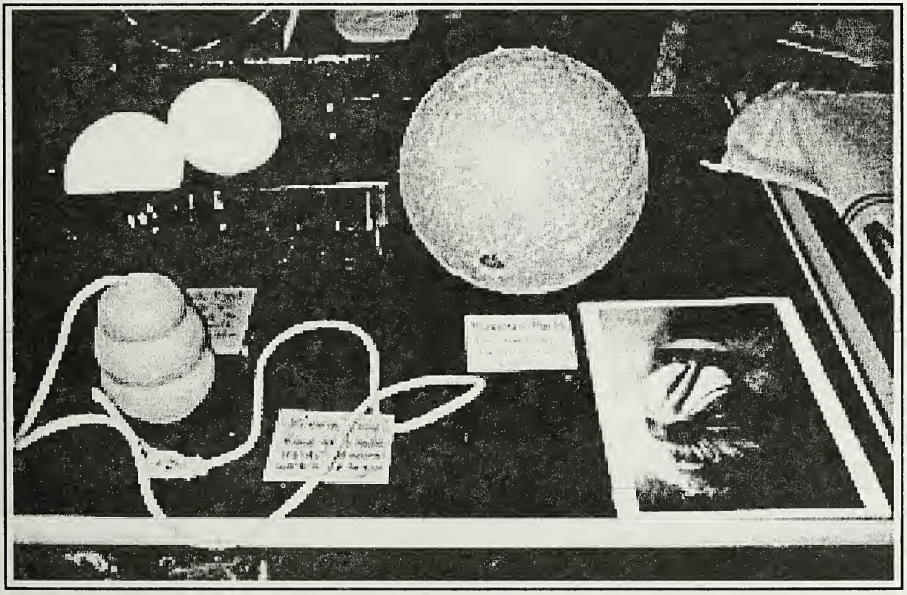


Keeper Michelle Kohlhagen explains animal food items. "Do touch, do smell, but do NOT taste." *(Photo by Erica Peth)*

The largest portion of the room was dedicated to "Fun." On display were various enrichment items next to photographs of the animals that use them. This included everything from a large barrel that had been reshaped by an elephant, to a Boomer Ball® mauled by a tiger. Guests read descriptions of how specific animals browse, use feeders, props, scents, feathers, and eggs. Most

Elephant barrel, gorilla feeder bag, and an *Animal Keepers' Forum* article explaining how to construct the bag (written by Birmingham Zoo Keeper Peggy Hoppe) *(Photo by Erica Peth)*

enrichment items could be touched and held. An article published in *Animal Keepers' Forum,* written by Birmingham Zoo keeper Peggy Hoppe, was pictured next to the actual enrichment item described and photographs of the animals that use that item. Keepers also decided to incorporate some of the tools they use most frequently and every animal department was represented. Tools such as boots, hoses, and brushes were displayed along with crates, nets, and training tools. Also included were examples of daily keeper reports, enrichment logs, and action plans. Descriptions were placed next to the object, and a keeper was on hand to answer questions. Guests utilized a great photo opportunity by photographing their children who had climbed into a crate used to transport gorillas. To add a Halloween touch, plans originally included a "forage like a gorilla" section next to the transport crate so that children could forage for plastic spider rings in the hay. We eventually decided against the idea because of the high volume of visitors predicted to walk through the room. With all there was to see and do, we



Enrichment items, descriptions, and photos of the animals that use the item *(Photo by Erica Peth)*

were glad we kept it simple. To make the most of all our space, animal textbooks, training literature, and posters depicting species from around the world were hung throughout the room to show some of the resources utilized by keepers.

One of the final additions to our room was a donation box that highlighted the relief effort for the Audubon Nature Institute in New Orleans after Hurricane Katrina. Exposure was gained for the campaign, and brought attention to the collaboration amongst zoos to support this endeavor. The donation box enabled visitors to make a monetary contribution, and funds raised have been given to the Audubon Relief Effort.

The remaining section of the room was all about "Feces." By the end of each night, the "So You Want to be a Zookeeper?" room became known as the "poop" room. For every one person repelled by the thought of real animal feces, five more were attracted to the idea. A keeper dressed as a giant piece of feces, and two others dressed as flies stood behind the fecal displays. One child approached the keeper dressed as feces and exclaimed to him "Don't tell me what you are!" Adults whispered to each other "Is he what I think he is?"

Keepers (l-r) Michelle Kohlhagen, Neal Jamieson, and Tammy Morano dressed as Poo and Flies *(Photo by Will Ratcliffe)*

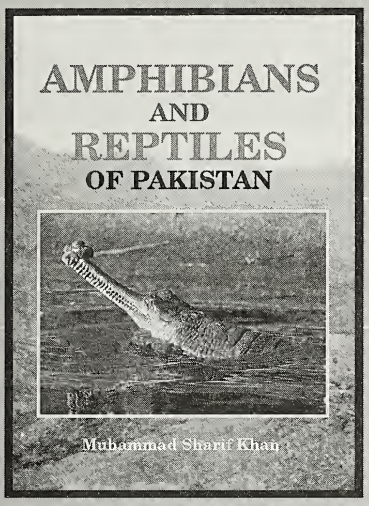
Actual fecal samples collected that day were presented in sealed plexiglass containers and positioned behind flip cards labeled "Whose Poo?" Guests could look at the sample, flip up the card, and see a photograph of the animal that the feces came from. The tables were decorated with coprolites and plastic flies. This section brought just as many squeals and looks of disgust as the live insect experience at the entrance of the room. This is where the next generation of keepers was separated from the rest, and the future keepers came through the room a second and third time.

After a week of preparation, and the excited crowds on four nights of Boo at the Zoo, all our collaboration and ingenuity had paid off. "Food, Fun, and Feces" was even more successful than we had envisioned and all involved felt a great sense of pride at what had been accomplished. The planning process was motivating and proceeded quickly, and keeper staff demonstrated superb teamwork in the design and implementation phases. We used basic tools and simple animal care concepts in order to convey common themes. About 15,000 trick or treaters had the opportunity to gain insight into the world of zookeeping with a fun, educational, and "Fear Factor" approach well suited for Halloween. This was a great occasion for keepers to leave guests with memories that are sure to last longer than the candy they received.

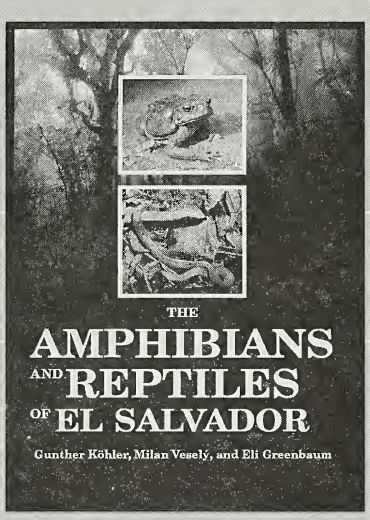
Website for 2006 AAZK Conference Now Online

AAZK will be heading to Chicago in the fall of 2006 for its National Conference. It is being hosted by the Lincoln Park AAZK Chapter and the Lincoln Park Zoo. They now have a website up and will be adding information on the upcoming conference as it becomes available. The website address is www.aazk2006.org< There is also a link to this site from the main AAZK website (www.aazk.org).

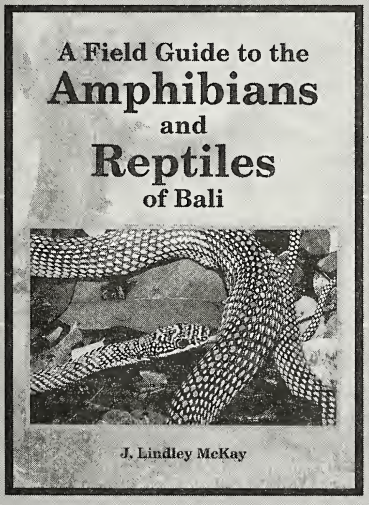
REPTILES • AMPHIBIANS • SHARKS



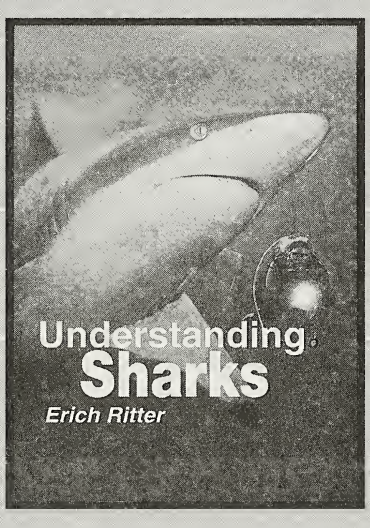
Amphibians and Reptiles of Pakistan
by Muhammad Sharif Khan
Orig. Ed. 2006 328 pp.
ISBN 0-89464-952-3 $145.00



The Amphibians and Reptiles of El Salvador
by Gunther Köhler, Milan Veselý & Eli Greenbaum
Orig. Ed. 2006 248 pp.
ISBN 1-57524-252-4 $49.50



A Field Guide to the Amphibians and Reptiles of Bali
by J. Lindley McKay
Orig. Ed. 2006 146 pp.
ISBN 1-57524-190-1 $39.50



Understanding Sharks
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English Ed. 2006 280 pp.
ISBN 1-57524-269-9 $59.50

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Chapter News Notes

Greater Houston Chapter of AAZK

One great year ends and another begins! The Greater Houston Chapter is anxious to get a new year of fundraisers and conservation activities underway, but first we must take a look at a job well done in 2005.

As mentioned in the September issue of the *Forum*, GHCAAZK has participated in many fundraisers including the Six Flags AstroWorld Spring Spin, numerous bake sales, and earned money from aluminum can and printer cartridge recycling! We were very excited to introduce a new fundraising concept for our Chapter in the form of Hyperbolic Funnels, which turned out to be a huge success!

Our Chapter's participation in the zoo's annual Enrichment Day was tremendous! We sold animal paintings and the monies raised allowed keepers to submit requests for enrichment items. With this money, we were able to purchase just over $1200 of enrichment items.

Bowling For Rhinos! We raised an incredible $8,000! Food, drink, t-shirts and fun were had by all. Thank you to all who participated in such a worthy cause! We capped the year off with our fun and sometimes embarrassing Zookeeper Olympics which tested our keepers' strength and endurance. Can you make a diet blindfolded? How fast can you unravel a tangled hose? Do you think you could push a wheelbarrow in a straight line after spinning in a circle 10 times? In addition to finding the answers to these questions we also enjoyed a 50/50 raffle, a silent auction and endless food and drink! What a great way to kick off the holiday season and end the year!

Conservation was a big part of our year. We participated in several Texas Parks & Wildlife conservation projects including a Crab Trap Clean-up, Adopt-A-Beach Clean-up, and also adopted our own mile of beach! Financially, we supported the following projects/organizations in 2005: California Sealion field study with NOAA, Ocelot Research Project, St. Vincent's Book Drive, Maned Wolf Population Habitat Viability Assessment, Black Lion Tamarin Project, Wildlife Care Center, Belize, and the Center for Ecosystem Survival.

We also had 11 speakers throughout the year, hosted several "Lunch & Learn" programs, and an AAZK National Membership Drive in spring and winter which doubled our membership!

I would like to take the time now to thank last year's officers for a year to be proud of! A special thank you to:

Jen McLain - President
Stephanie Nageotte – Vice President
Susan Shepard – Treasurer
Tammy Buhrmester – Secretary
Julie Hartell – Liaison

Welcome, good luck and have fun to the new officers of 2006:

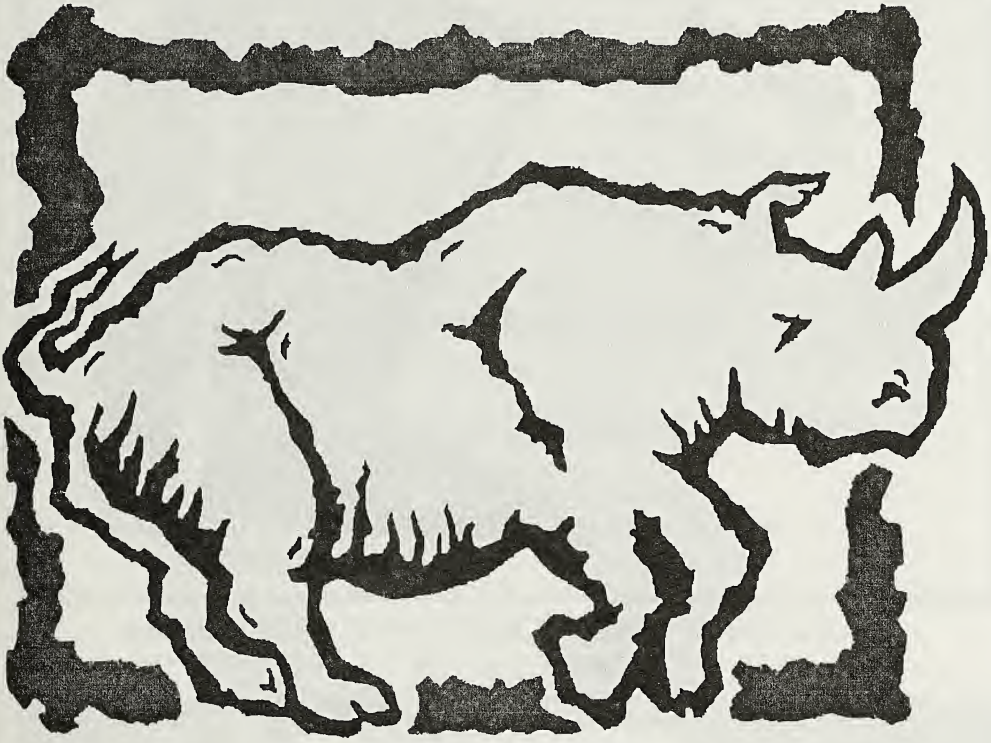
Stephanie Nageotte – President
Alissa Van Der Kamp – Vice President
Jen McLain – Treasurer
Tammy Buhrmester – Secretary
Laura Wachowiak – Liaison

Once again "thank you" to all our dedicated officers, management, keepers and volunteers who helped to make 2005 a great success! We look forward to many more accomplishments in the coming year!

-Laura Wachowiak Chapter Liaison

What's your Chapter been up to? Let us know about your successful fundraisers, guest speakers, conservation projects, new officers, new logos, etc. We want to hear from you! Send your Chapter News to the *AKF* Editor at: akfeditor@zk.kscoxmail.com

Logo T-Shirts Are Here !



AMERICAN ASSOCIATION of ZOO KEEPERS

Order Info ☛

See the shirts in FULL COLOR on the AAZK Website
www.aazk.org

White Shirt

The official AAZK Logo Shirt!
These short-sleeve, crew neck shirts are very high quality
Pre-shrunk 100% Cotton
AAZK is boldly printed in black on the front left
The AAZK logo, measuring 9" x 11", in four-color process
is screened on the back of the shirt
Let folks know you support AAZK, both coming and going!
Sizes S,M, L and XL and XXL

$17.50
add $1.00 for XXL
(Includes $3.50 postage and handling)

Blue and Gray T-Shirts

So white is not exciting enough?
AAZK also offers two other shirt choices in long sleeve
These excellent quality shirts are available in
Pre-shrunk 100% Cotton
AAZK is boldly printed on the front left of the shirt
With a two-color full size logo screened on the back
Available in either Gray (gray/black logo)
Or Royal Blue (gray/black logo)
Available in S, M, L, and XL

$22.50 (includes $3.50 postage and handling)

Patches

Get your official AAZK patch!
Sew it on your uniform and/or jacket
This four-color Rhino logo patch measures 3.0" x 3.75"

$8.00 (includes $2.00 postage and handling)

Introductory Special!

Get one AAZK White Shirt
with the AAZK Patch for only $23.00
(Includes $5.50 postage and handling)
You save $2.50!

Logo T-Shirt Order Form

(Only available for U.S. and Canadian purchase)

Count me in! I want to show my support for AAZK by proudly wearing a logo T-shirt. Please send the following:

___White, short-sleeved T-shirt(s) @ $17.50 each (add $1 for XXL) $_____

Circle Size: S M Lg XL XXL

___Blue long-sleeved T-shirt(s) @ $22.50 each $_____

Circle Size: S M Lg XL

___Gray long-sleeved T-shirt(s) @ $22.50 each $_____

Circle Size: S M Lg XL

___ AAZK Logo Patches @ $8.00 each $_____

___ Introductory Special (white T-shirt & patch) @ $23.00 $_____

Circle Size: S M Lg XL XXL

(PLEASE PRINT) **TOTAL FOR PURCHASE** $_____

Name_____

Address_____

State/Province_____ Zip/Postal Code_____

I wish to pay by: Check/Money Order Mastercard VISA

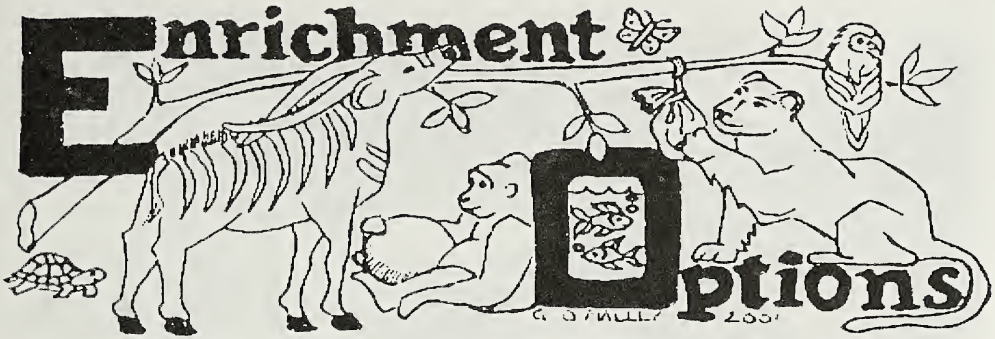
Credit Card #_____ Exp. Date_____

Name as it appears on credit card_____

Daytime Phone #_____

Email_____

Mail order form with payment to: T-Shirts, AAZK,Inc., 3601 SW 29th St., Suite 133, Topeka,KS 66614-2054. You may also place an order by phone using a credit card (1-800-242-4519 [US] 1-800-468-1966 [Canada] or order from the AAZK website at www.aazk.org



EO Editors - Dawn Neptune, Utah's Hogle Zoo
and Rachel Daneault, Disney's Animal Kingdom

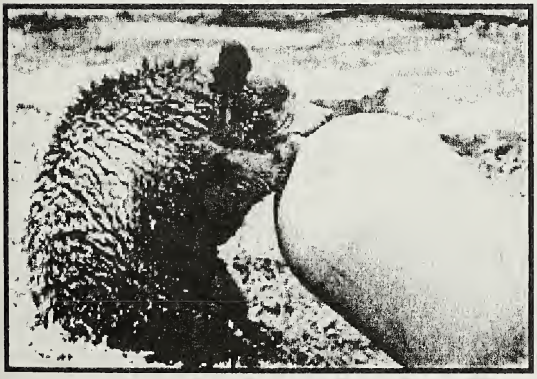
From the Editors: Enrichment Options is pleased to offer Part 2 of a wonderful three-part series focusing on the most important element of a successful enrichment program - involvement! These three installments highlight some creative ideas to increase enthusiasm and engage not only our animals but our staff, volunteers and visitors as well. We hope that this series inspires your own New Year's resolutions to promote enrichment at every level within your own facility. Have fun and have a very enriching 2006! See Part 1 on "Community Involvement in Behavioral Enrichment at The Phoenix Zoo" in the January 2006 issue of *AKF*.

Get the Ball Rolling!
How to Create the Framework for a Successful Enrichment Program

Alicia Shelley, Zookeeper; Enrichment Committee Chair
Troy Paisley, Outreach Presenter, Enrichment Committee Co- Chair
Columbus Zoo and Aquarium, Powell, OH

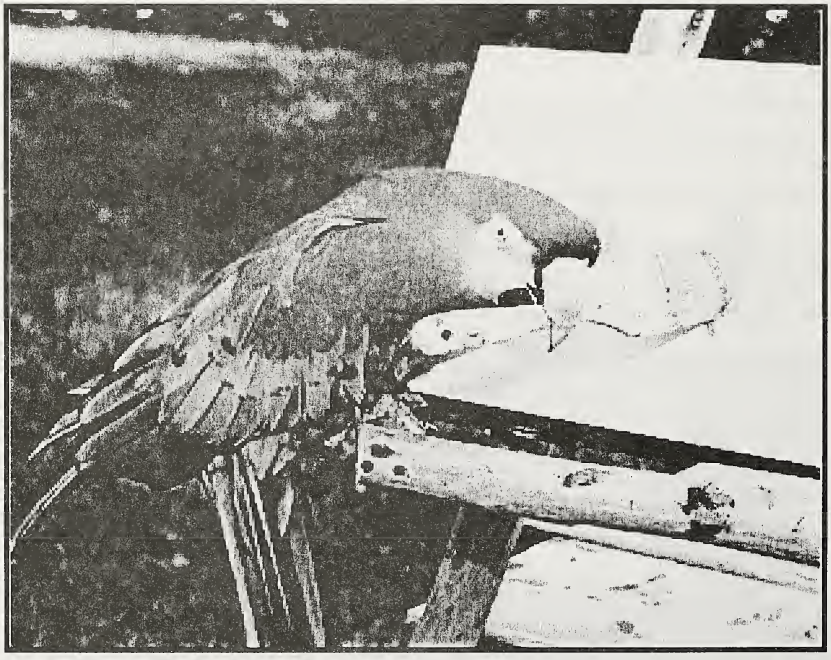
Animal enrichment is an ever evolving and exciting part of zoo keeping. It takes a team effort from all involved to benefit both the animals and visitors. Are you having a hard time getting the ball rolling at your zoo? Let us share how the Columbus Zoo and Aquarium's multi-faceted enrichment program has grown over the past several years.

Our enrichment committee has grown by leaps and bounds over the past several years. What was once the responsibility of just one person is now a team effort by many departments including keepers, marketing, education and planning. A curator on the committee has been a great help to get the staff motivated. Support of the program by the director and management has been achieved by video documentation of visitor's reactions to enrichment as well as surveys. Twenty core members and all zoo staff and volunteers are invited to meetings which are held once a month. Six working meetings are mandatory for keeper staff while the other six are more generalized to prepare for upcoming events.



Brutus enjoys a Weeble® toy
(photo courtesy of the Columbus Zoo Media Dept.)

Volunteers play an important role in helping the zoo visitor understand and appreciate the importance of behavioral enrichment for captive animals. *(Photo by Alicia Shelley)*



Rio the macaw shows off his artistic talents during an Enrichment Day event at the Columbus Zoo. *(photo courtesy of the Columbus Zoo Media Dept.)*

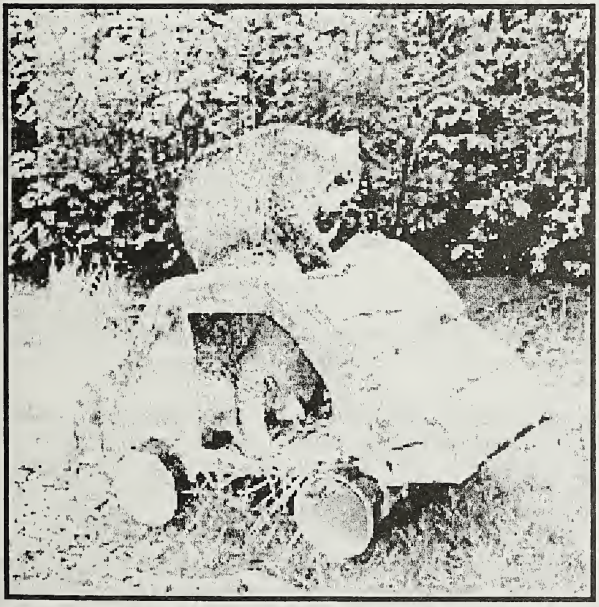
Volunteers can be a tremendous asset to any enrichment program. They can assist staff with the preparation and implementation of many different projects. We are lucky to have a great group of volunteers which includes zoo aides, adult volunteers, and docents. Offering perks and positive reinforcement to these individuals helps to build a strong support base. At each of the enrichment events, volunteers are provided a shaded area and water and the zoo purchases pizza and drinks for workshops. All volunteers receive an enrichment photo of an animal for each event that they help with. A fund called the "Jean Dixon Fund" was established in memory of a docent that asked that donations be made in her name for enrichment. All fundraising profits go into this fund.

Documentation is also a vital component of enrichment success. Accurate record keeping insures that everyone is clear about what is happening and why. The Columbus Zoo utilizes an electronic documentation system which communicates each step of the enrichment process from approval, to implementation, to rating the end product. If an item is not approved, a reason must be given so that adjustments can be made and the request can be re-submitted.

This banner anounces to zoo visitors that enrichment will be the order of the day.
(Photo by Alicia Shelley)

In the past, this paper trail could take up to two weeks and now it can be finished in a couple of days. Statistics may be run at any time by entering the animal's ISIS number. Pre-enrichment calendars are used within departments in order to avoid duplicating enrichment items more than once a month.

Another main goal of an enrichment program is educating the visiting public. Through seven "Enrichment Day" events throughout the year, visitors at the Columbus Zoo can catch some of the action and participate in activities that teach the many ways that we improve the lives of our animals. We hold the following events each year; Eggs, Paws and Claws, Cinco de Mayo, Enrichment Day, Block and Roll, Melon Mania, Pumpkin Smash and Santa Paws. This year on Enrichment Day we sold paintings by the animals for the first time with great success. Our events are advertised through our website, member newsletter, television and radio with the help of our marketing department.



Bobcats explore their enrichment "car" *(Photo by Alicia Shelley)*

By simply building enthusiasm for your program, you too can begin to gain support from many levels including management, staff and volunteers. This support can then lead to many positive changes and improvements. We all know that change takes time, but it only takes a small group of dedicated individuals to get the ball rolling!

(Ideas appearing in this column have not necessarily been tested by the editors for safety considerations. Always think ahead and use good judgement when trying new ideas. You are invited to submit material for the Enrichment Options Column. Look in the January 2004 issue of AKF for guidelines for articles acceptable for this column's format or contact the editor at akfeditor@zk.kscoxmail.com for a copy of the guidelines. Drawings and photos of enrichment are encouraged. Send to: AKF/Enrichment, 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054, USA. Eds.)

Leather Elves Enrichment Device Contest

Attention all AAZK members, it's time to put your thinking caps on. The AAZK Enrichment Committee and The Leather Elves are happy to be sponsoring the 5th Annual Enrichment Device Design Contest. If you've got an idea for a device that's just taking up space in your brain, or if you have built something that has worked particularly well with your animals, share it with the world.

Entries will be judged on safety, innovation and affordability. Keep in mind The Leather Elves do not weld, and they do not use materials such as sheet metal. The winning device will be named after you, built by The Leather Elves and a portion of the proceeds for each sale will go to AAZK. Please send a written description and a diagram or drawing of your idea (don't worry- you do not need to be a professional artist!!) to:

Robin Shewokis/ The Leather Elves
43 Mutton Lane
Weymouth, MA 02189

Entries must be received by 30 April 2006. The winning design will be announced at the AAZK National Conference in Chicago, IL and highlighted in a subsequent issue of the *AKF*.

Lee Houts Enrichment Excellence Award - Let Someone Shine!

Have you been impressed with an initiative that an individual or group has developed to better enrich their animals? Has an individual or group **you** know, developed an activity for a species in their care that has brought forth breathtaking natural behavior? Do you know an individual or group that has spearheaded a dynamic program helping their department move forward with sustainable, accountable, zoo-wide enrichment? Has this individual or group inspired you through their dedication to enrichment for captive wildlife? If so, you can let them and their colleagues know just how much their hard work is appreciated through the Lee Houts Enrichment Excellence Award. Information for making a nomination will be in the March 2006 issue of the *AKF*, but start thinking now of that special person or group who you think may be an Enrichment Hero! Award recipients and their work will be highlighted in an issue of the *AKF*.

Call for Submissions for Enrichment Options Column

Enrichment Options readers - WE NEED YOU!! We are looking for any and all articles that discuss enrichment processes and philosophies as well as device articles. We are, however, looking for device articles to discuss not only the construction of the device but also the goals, behaviors to be encouraged, process of documentation and findings upon evaluation. We also want to know about the programs, processes and philosophies at your institution and how they work for you.

But here comes the critical piece to this equation. We need you, our readers, because you are our most important contributors. We need you to submit articles for publication because the column simply cannot exist without you. We want to share information with institutions all over the world, but we can't do it without your submissions. We want to hear about how the enrichment process works for your facility. We want to know about specific enrichment devices that are working for your animals. We want to hear your creative perspectives on all things enrichment!

Submissions may be sent in hard copy (also include a disk or CD) to: Enrichment Options, AAZK, Inc., 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054. Or you may submit material electronically to akfeditor@zk.kscoxmail.com. Please send photos, graphs or charts as separate jpg ot tif files. Make sure to provide captions and photo credits. Manuscripts should be sent in MS Word format only. Please provide your contact information, including email and daytime phone number.

We hope to hear from YOU soon! Thank you in advance for your contributions! - *Enrichment Options* Co-editors Rachel Cantrell, Disney's Animal Kingdom and Dawn Neptune, Utah's Hogle Zoo.

People Skills for Animal People

By Jolene Hamrick
AKF Associate Editor
Tucson, AZ

Understanding Diversity in Personality and Work Styles - *Part I*

Because your success as an employee will at some point in your career hinge on how well you communicate with others, this column is going to hit on the topic of communication time and time again, each from a slightly different perspective. You will see common themes presented in slightly different contexts in the hopes that you will have a variety of tools from which to pick and choose in order to have the right tool for the right moment or the right task.

Chances are one or more of your co-workers has a tendency to drive you absolutely mad. Sometimes you probably even think they do it on purpose just to get under your skin. After reading this series they're still going to drive you mad, but maybe you'll be a little more willing to forgive their idiosyncrasies and focus on how they benefit your team or your institution as a whole. Furthermore, once we understand what someone's work style or personality type is, we can begin to understand how to communicate with them. There are as many personality style models out there as there are people with PhD's. This group of articles is not meant to give you complete exposure to one or all of the models, but to put work styles into context for you. If you are interested in this approach, it is up to you to do further research on the subject.

As animal behaviorists we take care in making observations and considering the possibilities before drawing conclusions. We consider stimuli in the environment, the animal's age, and the animal's past experiences when trying to discover the meaning behind a behavior. We're careful not to anthropomorphize and project our own feelings onto the creature. Yet, when interacting with our own, we often do the exact opposite. We receive signals from others and are quick to jump to conclusions as to what those signals mean. A four-step behavioral model introduced to me in a Fred Pryor seminar goes something like this:

1. We observe a behavior
2. We assign meaning or interpret the behavior (usually without much thought)
3. We have feelings about the behavior
4. We then act based on those thoughts and feelings

The critical step here is number two. What if we were to put as much thought and effort into understanding step two for our human counterparts as we do for the animals we care for? Might we be just a little less critical and a little more forgiving?

Before we can understand our co-workers' personalities and work styles and therefore begin to work with them ,and hope that they will work with rather than against us, we must take a little more time to make careful observation. We must ask ourselves what is it that we are seeing and then what is the meaning we are automatically assigning? In trying to prepare for this article, I was able to scrounge up a copy of the Toronto Chapter's Keeper Profiles video. For those of you who have seen this, you know that this spoof on the various stereotypical keepers is hilarious because it's true! For those of you who haven't, this exercise provides a perfect excuse to get your own copy. *(Editor's Note: E-mail ZooDVD@aol.com to find out how to order a copy of Keeper Profiles.)*

We all know that anal retentive keeper who has to pick up every last bit of hay before putting in the new, or has to have the hose wound in the right direction and the rake hung in just the right spot. We know the bunny-hugger, over-emotional keeper who "cares too much", and the victim who is never appreciated, always blames the system, and spends much of his or her day making excuses. We've met the super-keeper who continuously runs around all day feverishly trying to get everything done because there isn't enough time in the day, and the keeper who is two years from retirement and just wants to peacefully live out the rest of his/her time doing as little as possible because they've already paid their dues. Let's not forget the long-time keeper who insists that we're going to do it the way we've always done it because if it ain't broke how come we have to fix it now?

Below is a chart that takes some of the judgmental interpretations that we assign to behaviors and the associated neutral personality characteristic that may be associated with that behavior. This table is by no means all inclusive, but is meant to give you a flavor of everyday judgments we are making.

Interpretation	**Characteristic**
Anal Retentive	Detail-oriented
Anti-social; Cold	Logical, Analytical; Independent
Inflexible, Controlling	Craves structure and routine
Unable to work alone	Social, Emotional,
Irresponsible	Risk-taker
Dreamer, Lazy	Creative
Critical	Maintains high expectations
Disorganized	Flexible, Multi-tasking

Before we continue on with this discussion in April's issue of the *AKF*, take some time over the next couple months to consciously walk yourself through the above steps one thru four and discover what meanings you are attaching to behaviors and events that are taking place around you. Also, consider what personality characteristics you possess and how others might be interpreting them. Remember, you can't change others, you can only change yourself and how you react to others. Start asking yourself what your role and responsibility is in your work environment and how others are feeding off of you? Next time we'll probe a little further into this concept.

Deadline Approaching for "Early Bird" Registration for the 2nd International Congress on Zookeeping 7-11 May 2006 on the Gold Coast Australia

Thanks to some very supportive sponsors registration costs for early bird full registration are $450 Australian dollars. Based on today's exchange rates this works out approximately $US338 or Euro 279. Accommodation is additional to this and we have secured a good rate at the conference hotel - the Gold Coast International. Triple share for 4 nights works out at $280 Australian dollars or approximately $US210 or Euro 174 which includesbreakfast.The full conference registration will cover all events which include icebreaker Sunday night, Dreamworld dinner Monday night, breakfast at Currumbin Sanctuary Tuesday morning, BBque dinner Tuesday night and the conference dinner at Seaworld Wednesday night. All functions include food and some drinks. Morning, afternoon tea & lunch will be supplied each day Monday to Thursday. Accommodation is limited so it important that people register early for the conference. The early bird conference rate finishes **28 February 2006** after which full registrations rise to $AUD550.

We are offering a number of pre and post conference tours which include to Australia Zoo, Koala habitat field work, North Queensland, Fraser Island and O'Reilley's Rainforest Retreat. All information on these tours is available in the conference registration information on the ICZ website.

Registration information, registration forms and accommodation booking forms are all available on the ICZ website - www.iczoo.org <http://www.iczoo.org/>

Legislative/Conservation Update

Compiled by Georgann Johnston
Legislative Advisor
Sacramento, CA

Map Turtles Become 1st Native US Species Named to Appendix III
The alligator snapping turtle *(Macroclemys temminckii)* and all species of map turtles *(Graptemys)*, which are native to the United States, are being given international protection by their addition to Appendix III of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The listing, which will allow the USFWS to work with States to regulate exports, marked the first time the U.S. has used Appendix III to protect native species.

The alligator snapping turtle, the largest freshwater turtle in the world, is found in AL, AR, FL, GA, IL, IN, IA, KS, KY, LA, MS, MO, OK, TN, and TX. The species is protected on State endangered species lists in IN and IL. The alligator snapping turtle is a species of concern due to several factors including: loss of habitat and collection from the wild for human consumption and for export as pets.

There are 12 species of North American map turtles, which range from FL to TX, as well as ND, SD, and parts of Quebec, Canada. Two species of map turtles are on the Federal list of threatened species and a third map turtle is a candidate species for Federal listing. Several other map turtle species are on State endangered and threatened lists. Map turtles are vulnerable for many reasons; some currently known threats to the species include loss of habitat, exposure to contaminants, and collection for the pet trade.

"Wild populations of these turtles continue to decline, in part because of their popularity as both food and pets," said Service Director Dale Hall. "Working in close partnership with the States, we determined that an Appendix-III listing would allow us to reinforce State protections for these species and provide key trade information to better conserve these vulnerable species." *Source: USFWS Press Release 16 December 2005*

Higher Standards for Farm Animal Welfare Adopted
The World Organization for Animal Health (OIE) – composed of 167 member nations – unanimously adopted animal welfare standards for farm animal transport and slaughter. The vote marks the first time a representative international body has formally endorsed global guidelines to improve the treatment of animals raised for food.

Worldwide, billions of farm animals are hauled to slaughter every year, and in most countries, transport regulations are weak or nonexistent. In Europe, millions of farm animals a year are sent on journeys of up to 90 hours – often subjected to intense crowding, extreme temperatures, and a lack of food, water or rest along the way. About 75,000 sheep die each year during ocean trips from Australia to the Middle East.

The OIE standards cover land and sea transport, as well as more humane stunning techniques and proper restraint methods. Although voluntary, the standards signal an international understanding that all animals deserve humane treatment. They also focus global attention on abusive farm animal transport and inhumane slaughter – and demonstrate that animal welfare is a legitimate topic in international trade discussions. The standards also may serve as a basis for legislation in member countries without current farm animal welfare laws and inspire stronger protections in other countries. *Source: Humane Activist September/October 2005*

Polar Bear Hunting to Commence in Greenland
For the first time in its history, Greenland will allow sport hunting of its polar bears *(Ursus Maritimus)*. By 2007, ten permits a year will be issued for tourists to participate in "polar bear safaris" in which

foreigners accompany a Greenland hunter on a mission to kill a bear. The decision comes on the heels of Greenland's announcement of a polar bear hunt quota, undertaken in response to criticism that the current level of kills by local sustenance hunters is unsustainable and new evidence that the animals are in serious jeopardy due to the effects of global warming on the Arctic. Taking action to limit the number of polar bears killed every year is progress–but turning the hunt into tourist entertainment shows that there is still a long way to go. Source: Humane Activist September/October 2005.

Millions in Coastal Wetlands Grants Announced by USFWS
The U.S. Fish and Wildlife Service (USFWS) will award more than $15 million in grants to 12 states to help conserve, restore and protect coastal wetlands, Interior Secretary Gale Norton announced on 6 January 2006. States included in fiscal year 2006 under the National Coastal Wetlands Conservation Grant Program include Alabama, Alaska, California, Georgia, Hawaii, Illinois, Maine, Massachusetts, Michigan, New Jersey, Texas and Washington.

The grants provide funding for 19 projects and will be supplemented with more than $12 million from state and private partners. The grants are used to acquire, restore or enhance coastal wetlands for long-term conservation benefits to wildlife and habitat. Partners in this year's projects include state and local governments, private landowners and conservation groups such as The Nature Conservancy, Ducks Unlimited, Scenic Galveston, Inc., Wildlife Forever Foundation, and many others.

National Coastal Wetlands Conservation grants are awarded to states through a competitive process. The program is funded under provisions of the 1990 Coastal Wetlands Planning, Protection and Restoration Act, with money generated from excise taxes on fishing equipment and motorboat and small engine fuels. A total of more than 200,000 acres will have been protected or restored since the grant program began. For more information, visit the program's home page at http://www.fws.gov/coastal/CoastalGrants/ *Source: USFWS Press Release 6 January 2006*

Animal Behavior Society Schedules Utah Gathering

The ANIMAL BEHAVIOR SOCIETY's 43rd annual meeting will be held 12-16 August 2006 in Snowbird, Utah, USA. Famous for its mountain scenery, wildlife and natural environment, the resort at Snowbird offers a perfect locale for our meeting.

We have an exciting schedule planned, including a Keynote Address by Tim Clutton-Brock (Cambridge University), a Distinguished Animal Behaviorist Address by Robert Trivers (Rutgers University), and a Fellow's Address by Carl Gerhardt (University of Missouri). Symposia include Behavioral Syndromes (organized by Andy Sih and Alison Bell) and Sensory Ecology (Tim Wright, Jenny Boughmann and Paige Warren), and there will be a workshop on Data Collection Software (organized by Sue Margulis).

The meeting will follow a similar format to those of previous years, with a welcoming picnic on Saturday and a closing banquet on Wednesday. The Snowbird Ski and Summer Resort in the Wasatch mountains of eastern Utah, 45 minutes from Salt Lake City, is perfectly situated to serve as the starting point for a vacation, less than one dayÇs drive to Grand Canyon, Zion, Arches and Bryce National Parks. Scientific sessions will be held in the Cliff Lodge at Snowbird, the same building where all of the hotel rooms are located. The condos are in the Lodge and the Inn at Snowbird, a moderate 5-minute walk from the meeting rooms.

We'll see you in Snowbird! For further information see http://www.animalbehavior.org/ABS/Meetings/Snowbird06/, or contact the designated host Jeff Galef (mailto:galef@mcmaster.ca). Contact Jill Mateo, Acting Chair of the ABS Public Affairs Committee, for a press pass (mailto:jmateo@uchicago.edu).

Birth and Development of a La Plata Three-banded Armadillo

(Tolypeutes matacus)

By
Melba T. Brown, Keeper
Smithsonian National Zoological Park, Washington,DC
July 6, 2005

The Smithsonian National Zoological Park's Small Mammal House currently has in its collection 2.3 La Plata three-banded armadillos (*Tolypeutus matacus*). This species has been exhibited at the zoo since 1985 and since then, there have been 16 births. Of the 16 births, nine have survived. Over the years, The Small Mammal House staff has refined the captive management and breeding of three-banded armadillos. This paper will present one effective method used to encourage successful births. Also, it will present a method to monitor and document the physical development of the young. The research for this publication was conducted during the years 2000-2001. It documented the pregnancy of our breeding female, Jucar, and the subsequent birth and development of her male offspring, Julian.

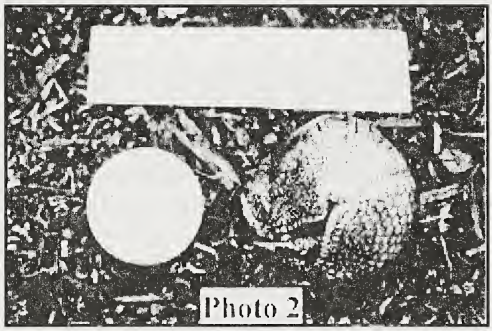
La Plata three-banded armadillos are fascinating members of the Order Xenarthra. They look archaic in appearance and resemble pill bugs when they walk. Actually, they are a South American mammalian species that are indigenous to Brazil, Argentina, Bolivia and Paraguay. Their natural diet consists mainly of ants and termites, but they are known to ingest other available food sources. As suggestive of their common moniker, they usually have three bands on their armor but sometimes individuals can have four bands. Two bands have also been noted, according to Walker. (Nowak, 1999) These bands are interspersed with thin, connective skin that allows the animal ample flexibility to roll into a tightly closed position, much like a ball. The armor of the adult armadillo is an effective barrier to predation. Infant armadillos have soft, pliable armor that makes them more susceptible to predation. The armor has visible, sparse hairs growing on it. Armadillos have massive claws that are used for digging and engaging in antagonistic as well as amorous encounters. Three-banded armadillos are relatively small in comparison to other armadillo species. Their weight averages about 1.30kg (2.867 lbs.). Three-banded armadillos give birth to one young at a time. After birth, the mother nurses heryoung and 'keeps it in check' for approximately a three-month period, during which time, the offspring grows and matures at an amazing rate.

At the time of this study, the zoo had a prolific breeding pair of three-banded armadillos. Previous to my research, the male became noticeably aggressive towards the female when she was close to giving birth. The male would mount and claw her. Unfortunately, several babies did not survive due to aggression from the male. When the activity towards her increased, she holed up in a wooden nest box and successfully gave birth to and raised her offspring. When we checked the baby periodically, we had to disturb her nest a little by pulling out the packed hardwood mulch. She became agitated and would often charge out of the nest box towards us in the hopes that we would go away. The visual inspection was quick but it took a little while for Jucar to settle down and reconstruct her nest. We considered ourselves lucky when we caught glimpses of the little one walking around the exhibit during the earliest stages of its life.

I wanted to create a successful birthing site where I could effectively and efficiently document how three-banded armadillo offspring mature and at what rate. I monitored Jucar's weight for several months and noticed that there was a gradual increase in her weight. Her abdomen became distended and she took on a typical 'pregnant look.' She was not able to close into her usual tight ball formation because her abdomen protruded. She was definitely pregnant. I moved Jucar to a holding enclosure and set up a nest box that was situated with the front door propped open where I could gain easy

access without causing her aggravation. (See Photo 1) I offered her artificial leaves to use in conjunction with the mulch for the construction of her nest. The leaves would neither decompose nor be a source of fungal growth. To my delight, Jucar readily accepted the artificial leaves and began to rip them to shreds with her claws for use in the nest. Over the course of a few days, she methodically packed her nest and eventually, a bowl shape was discernable where she lay. On 17 December 2000, Jucar gave birth to Julian. I approached the nest and with the ease with which I had hoped, I picked up the golf-ball sized baby without disturbing the nest, weighed him and took a close-up photograph. (See Photo 2) After my inspection, I placed Julian back in the nest and surprisingly, Jucar did not appear agitated. Possibly, her demeanor resulted from me not having to root around and disturb her nest looking for the baby.

Nest box propped open for easy access



Close-up photo of golf-ball-sized baby

At birth, Julian weighed 0.091kg (3.2 oz.) Over the next 12 weeks, I weighed Julian weekly, photographed him along with Jucar and charted his rapid growth, noting distinguishing features and changing physical and behavioral characteristics.

Julian's weight increased from 0.091kg to 1.159kg (2.55 lbs.) in 12 weeks. (See Growth Chart) One interesting observation is that three-banded armadillos position their tails, in the closed position, on either the left-tailed side or the right-tailed side, from the animal's perspective. At birth, the chosen side is apparent and the animal uses this particular side during

Growth Chart for *Tolypeutus matacus*, (12 weeks)

its entire lifetime. Julian assumed the left-tailed position at birth and most likely while still in utero. (See Photo 3) Males have a very prominent penis which extends to fit under the female's armor for penetration. (See photo 4) At birth, the eyes are closed, the claws are fully developed (See Photo 5) and the animal is able to walk. Its armor is pink and very pliable.

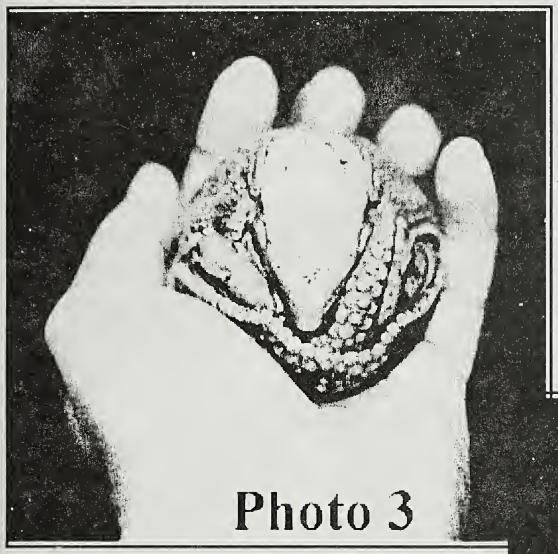


Photo 3

At left: Baby exhibiting left-tailed position

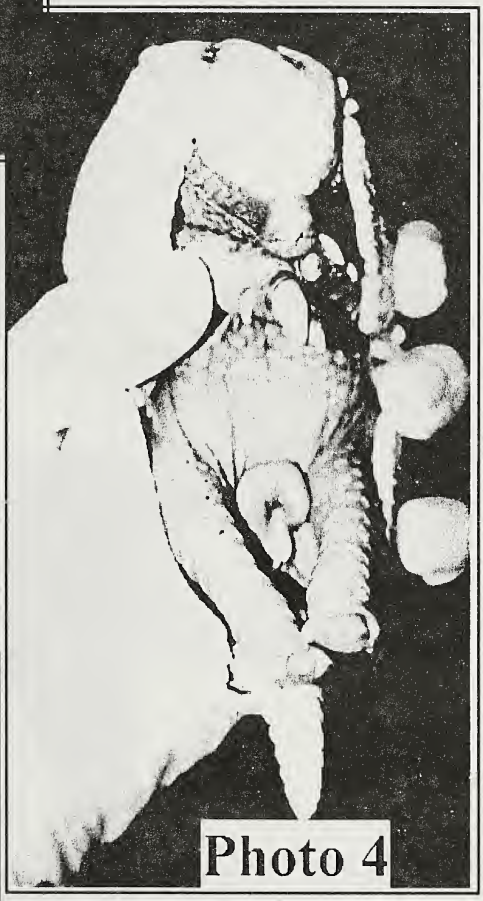


Photo 4

At right: Prominent penis allows male to fit under female's armor for penetration during mating.

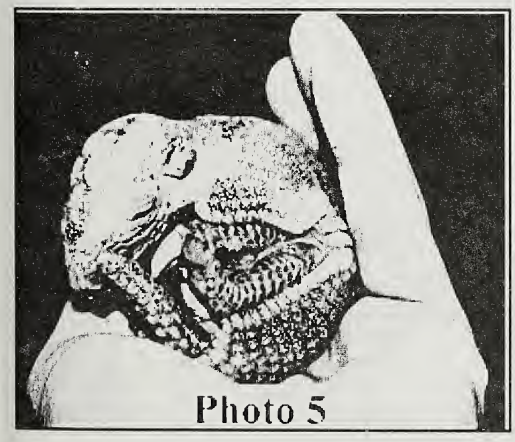


Photo 5

At left: Eyes closed, claws developed, able to walk at birth.

The characteristic quilt-like head pattern is visible at birth. Within three days, the armor color changes and the animal becomes more pale in appearance (See Photo 6). Within the first week, fine, white hair is visible on the edge of the armor. The armor hardens noticeably at two weeks of age. Also, at the beginning of this period, Julian seemed able to discern between lightness and darkness, even though his eyes were sealed. They opened partially when he was ten days old. (See Photo 7) By week three, he had noticeable hair on his abdomen and his legs started to harden. At five weeks, Julian's armor became much more defined in appearance.

Photo 6

At left: Within three days, animal is pale in color.

At right: At 10 days, eyes are partially open.

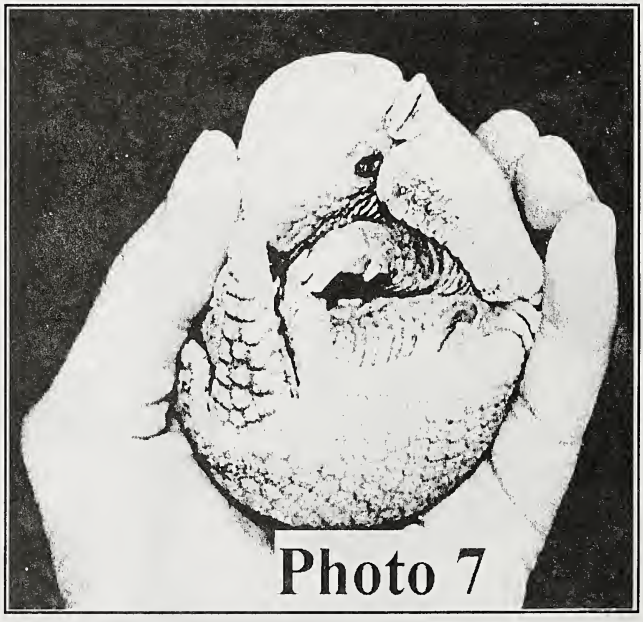


Photo 7

In terms of behavior, Jucar initially carried Julian around the exhibit if he walked a good distance from the nest. (See Photo 8) By week three, Julian's weight increased to the point where Jucar was unable to carry him around; instead, she pointedly nudged him thereby encouraging him to close into a ball and then she proceeded to roll him back to the nest. (See Photo 9) Also, by three weeks of age, Julian started to sleep away from the nest. (See Photo 10) At seven weeks, Julian was a little more than half the adult size. Around ten weeks, he was seen eating solid food. At twelve weeks, Julian was approximately 0.200kg (~ 7 oz.) less than his mother. His body size was close adult size. (See Photo 11) We allowed Julian to stay with his mother for a few more weeks and then we separated them and placed Julian with an older male sibling. Jucar was returned to her mate and she went on to give birth again, using the same method but without the increased documentation.

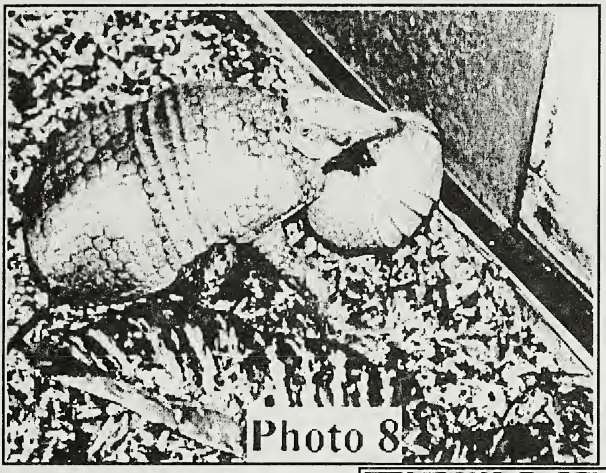


Photo 8

At left: Jucar carries Julian back to nest.

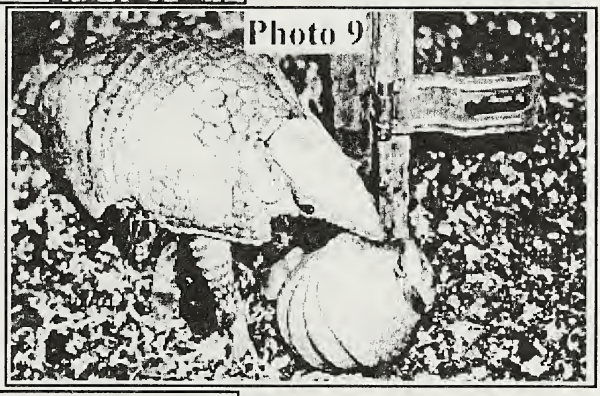


Photo 9

At right: Due to his increasing size, Jucar rolls Julian towards the nest.

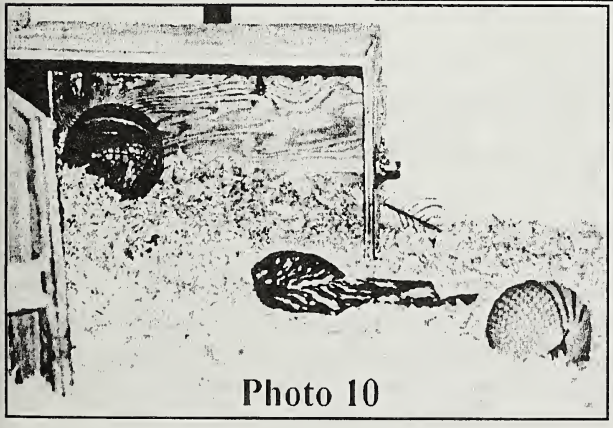
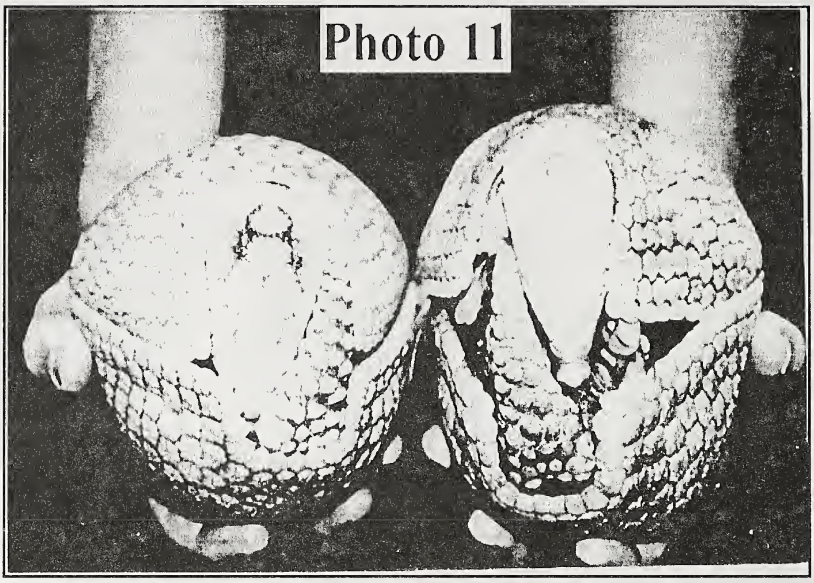


Photo 10

At left: At three weeks, Julian starts to sleep away from nest.



Above:: At 12 weeks of age, Julian (on left) is close to adult size.

La Plata three-banded armadillos are engaging little creatures. Due to their secretive nature, they can often elude visibility, especially when parturition occurs. One effective method to use to help ensure a successful birth is to create an area that is easily accessible so as not to disturb the natural behaviors surrounding a birth. The images that were taken during this project are currently being used by our Small Mammal House educational interpreters. It is one thing to describe what a newborn three-banded armadillo looks like but quite another thing to see what they look like. The visual impact on our visitors is one that fosters knowledge and this in turn is a building block towards the larger zoological goal of conservation.

Bibliography

Nowak, Ronald M. *Walker's Mammals of the World.* 6th ed. Baltimore and London: The Johns Hopkins University Press, 1999.

Amazon.com Users-- Don't Forget the AAZK Connection

Just a reminder that if you regularly (or even occasionally) purchase items on *amazon.com*, there is a way you can also help out the Association while you are doing your shopping. If you go to *amazon.com* from the AAZK Home Page (www.aazk.org), the Association will receive 5% of the cost of your purchase. The *amazon.com* icon is at the bottom right of the AAZK Home Page. And the percentage from purchase of goods is on all items you purchase there - books, music, etc. So next time you want to do a little online shopping at *amazon.com*, get there through the AAZK website and help out your professional organization.

REACTIONS

A Question and Answer Forum for the Zoo Professional on Crisis Management

By William K. Baker, Jr., Curator
Panthera Research, Maumelle, AR

Question
Do you have any recommendations for winter operations at a zoo?

Comments
Winter means different things to different people based on where you happen to be living at the time. But I'll take the spirit of the question as it applies to the colder regions of North America and pass on a few suggestions.

Training

- Your best resource for training is a solid first aid course like those offered by the American Red Cross®.

Awareness

- Watch the news for updates. I generally start my day with the local weather report and monitor the Weather Channel® by computer during the day, and check the evening update when I get home.
- Purchase a weather alert radio; preferably with the county alert function. There are numerous reliable brands out on the market.
- Provide a three-day weather forecast with your daily radio announcements to your staff. Make sure that they know what the low is for the next few nights. Watch for wind chill forecasts and readings.

Preparation

- Check and make sure that pipes are winterized and insulated.
- Let faucets drip a little to prevent line freezes.
- Leave cabinet doors under sinks open so that warmer air can circulate.
- Cover outside hose bibs where necessary to prevent freeze up.
- Know where your water shut-off valves are located.
- Inspect all heaters, (gas, electric, etc.) before the season.
- Disconnect and drain hoses that are outside of buildings.
- Consider purchasing "all-weather" hoses that stay flexible year-round.
- Inspect smoke and carbon dioxide detectors.

Emergency Supplies

- Flashlight and batteries.
- DOT or OSHA-quality first aid kit.
- Portable radio with weather band features and batteries.
- Non-perishable food and matches.
- Non-electric can opener and dish soap.
- Blankets and sleeping bags.
- Bottled water or water purification tablets.
- Fire extinguisher (ABC type).
- A high quality pocketknife, such as a Swiss Army®.

Clothing

- While most facilities can't go the expense, it's still wise to consider adding a Gore-tex® jacket, liner, and pants system to your wardrobe - even if you need to buy it out of your own pocket.
- While backpackers and campers already know this, always dress in layers to regulate your body temperature. Think polartec® fleece and polypropylene® underwear when you make clothing choices for layering.
- Remember that gloves and a hat can significantly reduce heat loss.
- Cover your mouth in extreme cold with clothing or a bandana.
- Also, don't forget cotton clothing is wonderful until it gets wet.
- Staff members who work in areas where their hands are constantly wet can find a degree of protection and insulation from neoprene work gloves.

Skin Protection

- To keep your hands in good shape use a high quality skin lotion on a daily basis. I recommend the unscented versions from the Curel® and Nivea® product lines.
- When your hands really do get torn and cracked, then move on to something more aggressive such as Corn Huskers®, Bag Balm®, or in really bad cases, Corona®. All are generally available at feed stores.
- Ideally, every time you wash your hands, you should be using some type of lotion. Anti-bacterial soap can often advance the drying process. Look for one that has skin softeners already in the product.

Vehicles

- Check and make sure that the fluid levels are all within normal limits and that you are using a winter-grade of oil for the engine.
- Always use coolant rather than water in your radiator. Remember, most coolants are toxic to animals, so look for a brand that's animal safe.
- Check your windshield wipers and ensure that they aren't rotten.
- Check your wiper reservoir level. Also, I recommend using Prestone® no-ice compound during wintertime. It's great for clearing your glass.
- Keep blankets, a shovel, road salt, and cat litter in your vehicle.
- Consider purchasing one of those pen-style propane torches to unfreeze locks or you can use a cigarette lighter. Canned de-icer works well, but it is fairly messy after the lock is unfrozen.

Next Month: You have mentioned using unscented products on several occasions. Why?

If you would like to submit a question for this column or have comments on previously published materials, please send them to AAZK, Inc., 3601 S.W. 29th St., Suite 133, Topeka, KS 66614 Attn: Reactions/AKF

(About the Author: Since 1985 Bill has been active in the fields of science, zoology, and wildlife management. His education and experience include a B.S. in wildlife management and post-graduate studies in zoology, Lab and Museum Assistant, Shoot Team Leader, ERT Member, Large Mammal Keeper, Senior Keeper, and Zoo Curator at various zoological facilities. His area of research is crisis management in zoological institutions, which draws upon practical experience and training as a Rescue Diver, Hunter Safety Instructor, NRA Firearms Instructor, and Red Cross CPR/First Aid Instructor. Away from work he operates Panthera Research, which is a research and consulting firm.)

Institutions wishing to advertise employment opportunities are asked to send pertinent data by the ***10th of each month*** *to: Opportunity Knocks/AKF, 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054. Please include closing date for positions available, and when setting these dates keep in mind that because of bulk-mail, most readers do not receive their AKF until the middle of the month or later. There is no charge for this service and fax or e-mail listings of positions which become available close to deadline are accepted. Our Fax is (785) 273-1980; e-mail: akfeditor@zk.kscoxmail.com< Listing must be sent as MS Word attachment. To post a position on the AAZK website, have listing to email address above by the 25th of the month for posting on the first day of the following month. We are no longer located at the Topeka Zoo, so please note new address to avoid delays in processing.*

Education Program Coordinator/Small Animal Keeper —Wild Things A.R., Inc., Salinas, CA (small, privately-owned facility)
POSITION AVAILABLE NOW. ***Deadline for application is 31 March 2006.*** Send resumés to: Wild Things A.R., Inc., 400 River Road, Salinas, CA 93908 FAX 831-455-1902 or email heather@wildthingsinc.com We are a hardworking staff caring for many animals. We are looking for another extremely dedicated – hardworking person to join our team. **Responsibilities:** Requires applicant to handle all animals to include reptiles, birds, small mammals and assist in the handling of larger mammals to include elephants, big cats, bears, etc. Daily duties include cleaning, diets and all activities involved with running a full-time educational program and daily tours both on and off site. **Requirements:** Must be physically fit and able to work weekdays, weekends, holidays, and evenings – 50+ hours/week. Must be–**good with children** and public speaking. This is a privately-owned facility. Animals are handled free contact. Learn more about the facility and the position by visiting our web site at www.wildthingsinc.com. Experience in both animal handling/husbandry and educational/outreach programs preferred. Pay rate: Approx $11-13/hr. No medical/no relocation compensation.

The following positions are offered by Catoctin Wildlife Preserve and Zoo in Thurmont, MD. Send cover letter and resumés with salary requirements to: R. Hahn, Chief Animal Person, Catoctin Wildlife Preserve and Zoo, 13019 Catoctin Furnace Road. Thurmont, MD. 21788; or fax at 301-271-2673; or email Rickhahn@CWPZoo.com We are looking for professionally- orientated people to grow with us. Information about our facility may be viewed online at www.CWPZoo.com Positions are available immediately and until filled.

Responsibilities: Duties include all aspects of animal care including feeding, cleaning, observations, animal and exhibit maintenance and enrichment, accurate daily record keeping, health monitoring, interaction with the public and assistance with department improvement projects.

Compensation: Salary is commensurate with experience ($17,160 to $24,960). Support for medical, dental and prescription health care and attendance at AAZK and other conferences and seminars. Paid vacation after one (1) year. Flexible work schedule and personal days.

• **Intermediate Animal Care** (Four positions)
Must be knowledgeable in the basic husbandry and natural history of mammals and/or birds, well organized and able to work well with all staff and visitors. Must have at least two (2) years experience. College degree a plus, but will still require hands-on experience. Must be able to lift 100 pounds and work some weekends and holidays. Good record keeping skills a must. Salaried. Reports to General Curator/ Registrar

• **Hoofed Stock/Ratites I** -
Works with deer, antelope, bison, camels, llamas and domestic sheep, goats and donkeys. Also ostrich, emu, rheas and cassowary.

• **Avian Specialist I** - Works primarily with psittacines and gallinaceous birds. Flamingos, ibis, doves, kookaburra, mud hens, condor, owl, cranes and ratites are also in collection. Knowledge of incubation and rearing chicks is required.

• **Large Carnivore Caretaker II** - Requires minimum of three (3) year's full-time experience in an exhibition setting working with a diverse collection of large cats and bears.

• **Primate Animal Care II** - Requires minimum of three (3) year's full-time experience in an exhibition setting working with a diverse collection of baboons and macaques thru lemurs and callithrichidae. Must have working enrichment knowledge and experience.

• **Vet Tech/Swing Animal Care** - Responsible for the overall health of the collection under the direction of the veterinarian of record. Works with birds, mammals and reptiles. Conducts routine fecal checks and vaccinations under the vet's supervision. Provides nursing care for neonates and infirm. Keeps health records with assistance from registrar. Vet tech certification required.

Aquarists -The Natural History Museum of the Adirondacks, Tupper Lake, NY
To apply, please send your letter and resumé to: Personnel Department, NHMA, PO Box 897, Tupper Lake, NY, 12986; Fax: 518-359-3253. Electronic files (preferred) may be sent to: careers@wildcenter.org Full time, benefited. ***Estimated Date of Hire: April 2006. Application deadline March 31, 2006.*** The Natural History Museum of the Adirondacks is an Equal Opportunity Employer Summary: The Natural History Museum of the Adirondacks, AKA the Wild Center, is seeking two innovative and experienced Aquarists to care for a diverse collection of native animals and plants, in the heart of a six-million-acre state park in upstate New York. The living collection includes North American River Otters, waterfowl, reptiles, amphibians, fish (primarily trout) and aquatic insects; contained in 50,000 gallons of water. Raptors, small mammals, snakes, and insects will also be displayed in this new museum that will open in July 2006. **Essential Duties and Responsibilities**: Feeding; Culture of both display animals and food organisms; Life support system operation and maintenance; Water quality testing; Maintaining exhibit aesthetics; Interpretation/public programs including public speaking and direct interaction with museum guests; Collection and transportation of specimens; Quarantine/disease recognition and control; Administering treatments/medications under the direction of the Curator and Veterinarian; and Record keeping. **Tasks Prior to Opening in Summer 2006:** Work with staff and others to support the work of exhibition and building contractors, fabricators to prepare the museum for opening season.Assist with managing independent contractors as needed. **Supervisory Responsibilities**: pervises and trains seasonal interns and volunteers as assigned. **Qualifications:** Two (2) years of paid animal husbandry experience in a zoo, aquarium or science museum; Experience with live food culturing; Experience in the collection, (simple gear - seine nets and dip nets) transport, and quarantine of temperate fish and invertebrates for a public aquarium, museum or science center; Experience with Raptors and/or rehabilitation of wildlife is desired and; Basic carpentry, plumbing, and electrical skills are useful. **Education and/or Experience:** A degree in Zoology, Biology or related field is preferred, but extensive experience with animal husbandry may be considered. **Physical Demands:** Requires some outdoor work. Must be able to lift 50 pounds.

Animal Keeper and Internships - Shell Factory, Fort Myers, FL
Positions are again available at the Shell Factory Nature Park and Botanical Trail in North Fort Myers, **FL.** We are a new little park that is growing FAST! We have been open just over a year and we have a variety of both wild and domestic animals to care for—Starting pay is $7.50/hr. We are looking for full and part-time applicants. Experience preferred. Please submit your resumé to danika@shellfactory.com or bring it and apply in person at 2787 North Tamiami Trail, N. Fort Myers, FL 33901 (239) 995 2141 ext. 545.

Naturalist Intern - Alaska Wildlife Conservation Center, Portage Glacier, AK
To apply please send a resumé, and cover letter ***by March 1, 2006*** to Diana Weinhardt, Director of Conservation and Wildlife Programs at Diana@alaskawildlife.org The Alaska Wildlife Conservation Center would like to invite all environmental education, wildlife biology, and outdoor education students, as well as pre-service teachers to become involved with wildlife conservation and environmental education by participating in our Naturalist Internship program. AWCC Naturalist internship typically begins in early May ending dates are negotiable. The position is based on a 40-hour per week schedule and offers a monthly stipend of up to $1,200 a month as well as limited on-site housing. **Responsibilities:** An AWCC Naturalist internship will provide the opportunity to develop and implement interpretive programs with a variety of themes, teach people of all ages on a daily basis, gain exposure to captive wildlife management techniques, learn about wildlife ecology, including interpretation of behavior, complete special projects related to environmental education, connect academic studies and work experiences, assist with the training of volunteers, and gift shop sales are among many other duties. **Internship Requirements:** Education: Coursework towards a BA/BS in applicable field or equivalent work experience required, with emphasis on ecology, wildlife biology, animal science or environmental/ conservation education, is recommended. **Experience:** Demonstrated ability to work with diverse groups. Public speaking and group management skills preferred. **Skills:** Computer skills should include the Microsoft Office. Must be able to communicate effectively both verbally and in writing. **Physical:** Must be able to walk unsurfaced trails, lift 50 pounds unaided, work in the outdoors, sometimes in adverse weather conditions, and work in a standard office setting. Job entails kneeling, bending, standing and walking for long periods of time.

Animal Handling Internship/Wild Wonders Outdoor Theater - Point Defiance Zoo & Aquarium, Tacoma, WA
To apply, please send application form and essay, resumé and two (2)references to: Point Defiance Zoo & Aquarium, Internship Program, 5400 North Pearl St., Tacoma, WA 98407. Application form is available by contacting: Jennifer Mack, Volunteer Coordinator, at the above address or Phone: 253-404-3695; Fax: 253-591-5448; or Email: volunteer@pdza.org Please note that this is an UNPAID internship. The deadline for application materials is ***April 1, 2006.***The animal handling internship program at Point Defiance Zoo & Aquarium is designed to provide individuals with practical learning experience and knowledge in the field of animal husbandry, animal handling, and public presentations. Interns will handle a variety of birds, reptiles, and mammals and participate in both formal and informal interpretive presentations. In return, the intern makes a significant contribution to interpretive animal programming at Point Defiance Zoo & Aquarium. The internship is designed to provide instruction in the following areas: *Animal Husbandry* - General maintenance and upkeep of animal exhibits/

enclosures; *Animal Observations*; *Nutrition and Diets* -Diet preparation; *Record Keeping*; *Environmental Enrichment*; *Animal Species Knowledge* - Natural history; Behavior; and Taxonomic relationships; *Animal Handling* - Basic handling techniques; Back-up techniques (assisting with animals not handled by intern); Safety practices; *Public Presentations* - Informal public presentations; Assisting with theater presentations. **Requirements:** To apply for an animal handling internship at Point Defiance Zoo & Aquarium you must: 1) Be currently enrolled in a college or university, or have recently graduated from a college or university.; 2) Have a minimum of one (1) year of course work in a major field of study to be applied during the internship (e.g. biology, zoology, animal behavior, etc.); 3) Be capable of the physical abilities required to work with animals (e.g. lift 50 pounds, frequent bending and stooping, etc.); 4) Provide proof of a current tetanus inoculation and negative TB test; 5) Submit an application; 6) Submit a resumé: 7) Submit two (2) letters of recommendation from an advisor or supervisor; 8) Undergo a phone or on-site interview; 9) Commit to working 40 hours a week for 3 to 4 months; 10) Interns may be required to work both weekend days. If you have any questions please contact the Point Defiance Zoo & Aquarium Internship Program by phone: 253-404-3695 or email: sluhring@pdza.org.

Exotic Cat Internship —Center for Animal Research and Education, Bridgeport, TX
To apply for this position please send your resumé and references to Attn: Heidi Riggs, 245 County Road 3422, Bridgeport, TX 76426. C.A.R.E. is currently looking for qualified interns for 2005 and 2006. The Exotic Cat Internships run in 90-day sessions that allow for experience in the zoological field. C.A.R.E. provides housing for all accepted applicants. For more information please see website at www.bigcatcare.org. **Responsibilities:** Assisting the Curator and Executive Director in planning and coordinating the care, diet, and maintenance of the habitats for exotic felines. Job duties include cleaning, food preparation, maintenance of enclosures and education work with the public. **Requirements:** Candidates must have good written/oral communication skills and the ability to work effectively in a team–oriented environment. Must have or working on a four-year degree in related field. All candidates must have the ability to lift 50 pounds and a willingness to work outdoors. Weekends and holidays are required.

Aviculture Interns Wanted - The Hawaii Endangered Bird Conservation Program at the Keauhou Bird Conservation Center (KBCC) on the Big Island of Hawaii and the Maui Bird Conservation Center (MBCC) on the island of Maui. For more information on internships at KBCC, please send a resumé, cover letter and the names and contacts of three (3) references to: Tracey Goltz P.O. Box 39 Volcano, HI 96785 or fax: 808-985-7034. For more information on internships at MBCC, please send this information to: Richard Switzer 2375 Olinda Road Makawao, HI 96768 or fax: 808-572- 3574. **Responsibilities**: Daily tasks include husbandry duties such as: diet preparation, aviary and facility maintenance, behavioral observations of breeding birds, grounds keeping, predator control. **Requirements**: Applicant must be able to live with several roommates in a remote area and should show enthusiasm for work with captive endangered Hawaiian birds. Applicant must have a valid driver's license and health insurance. Internships last for a 3-6 month period. Interns receive $20/ day stipend plus housing.

Big Cat Internships - Tiger Creek Wildlife Refuge, Tyler, TX
For more information or to download an Application Packet, see http://www.tigercreek.org/internships.html, no telephone calls please, all applicants must complete the Application Packet process for consideration of program participation. The Big Cat Internship as seen on Animal Planet involves Animal Care Apprenticeship and Public Educational presentations involving Big Cats This is a 90-day position (by 4 quarters/terms) allowing one to gain experience in the zoological field. **Responsibilities**: Job duties include cleaning, diet preparation, light maintenance, educational tours, etc. Interns are responsible for the daily cleaning and health monitoring of a large number of exotic feline species including but not limited to tigers, lions, leopards and pumas. Big Cat Internship opportunities also include working in environmental education with schools and youth groups in a variety of learning activities. Interns will present short guided lessons on animal care techniques, conservation and rescue methods, backgrounds on the big cats and much more. This wide variety of teaching opportunities and educational training provides the intern with an exciting array of new skills and experiences. Training is provided by the staff. **Requirements**: At least two (2) years of undergraduate college work in wildlife management, education, biology, or related field. If no college experience then two (2) years of verifiable work experience in unrelated field or one (1) year of work experience in animal care field. All applicants must be at least 20 years of age by start date. These positions require motivated persons with a career focus in biology/ zoology/wildlife management. Housing is provided for these non-paying positions. Interns provide a strong commitment to the refuge, with a six- day work week and light duties on Sundays.

Environmental Interpretation and Wildlife Care Internship - Trailside Museums and Wildlife Center, Bear Mountain State Park, Bear Mountain, NY 10911-0427. Contact: Jennifer Verstraete at (914) 786-2701 ext. 278 or 265; email - elayne.keith-feller@oprhp.state.ny.us. Start Dates: Summer internship mid-May through mid-August; Fall internship late-August/early September through early November. Internship is unpaid, but provides knowledge and experience; written evaluation gladly given. Possible course credit if intern can arrange it. Interns will work at least three (3) days a week, including one weekend day. No housing available. We

reimburse full payment for required pre-exposure rabies series. **Qualifications**: Enthusiasm, comfortable handling animals, motivated to learn. Must be 18 or older; preference given to college student looking for experience in the care of wildlife and in environmental interpretation. **Responsibilities**: 1) Provide care for permanently injured or orphaned park wildlife (mammals, birds, fish, amphibians and reptiles) in zoo setting. Under the supervision of a Senior Zookeeper will prepare food and diets, maintain enclosures and exhibits, and provide enrichment; 2) Interact with the public answering questions, interpreting exhibits, possibly developing and offering short interpretive talks.

Internship - (Tigers For Tomorrow Exotic Animal Preserve) Fort Pierce, FL To apply send cover letter and resumé to: Susan Steffens/ Executive Director- Tigers For Tomorrow, 18905 Orange Ave, Ft. Pierce, Fl or email to Sue@tigersfortomorrow.org. This non-profit organization is seeking two (2) possibly three (3) student interns for the 2005 fall season. Tigers For Tomorrow is a last stop exotic animal rescue preserve that houses and specialize in big cats. The preserve is in the beginning stages of moving to a new facility, interns will assist management in the move and care of the animals. **Responsibilities**: The intern will assist in the daily husbandry of preserve residents, assist in interpretive talks, work with the public. **Requirements**: Desirable qualifications include the ability to communicate effectively with people, writing skills, orientation to details, and be a self-motivator. Benefits include room and board, and $50.00 a week. Personnel transportation is required.

Volunteer Animal Care Specialist Intern - Great Plains Zoo/Delbridge Museum, Sioux Falls, SD
If interested, please send a cover letter and resumé: Jay Tetzloff, Director of Animal Programs, Great Plains Zoo, 805 S. Kiwanis Ave.,Sioux Falls, SD 57104. jtetzloff@gpzoo.org The Great Plains Zoo ... Delbridge Museum is offering an opportunity for education and experience for tomorrow's workforce. The Great Plains Zoo and Delbridge Museum of Natural History has several internship opportunities available to those interested in pursuing a career in Animal Care and Zoo Management. **General Statement of Duties:** The Animal Care Specialist Intern is responsible for assisting the Animal Care Specialist in the care and feeding of zoo animals including the cleaning and maintenance of buildings, grounds, and exhibits. **Responsibilities**: Assist the Animal Care Specialist in the general daily care of the animals in the assigned exhibit and holding areas. Maintains exhibits and holding areas in a clean and presentable condition at all times. Assist in the observation the animal collection for signs of illness, general lethargy, injury, and dietary problems. Responsible for other duties as assigned by the Senior Animal Care Specialist and/or the Director of Animal Programs. The Animal Care Specialist Intern reports directly to the Senior Animal Care Specialist and/or Director of Animal Programs. **Requirements**: Requires a high school diploma or GED certificate. Prefer candidates that are pursuing a degree in a zoological related field. Must be able to work weekends, holidays, and evenings as assigned. Must commit to a schedule; 300 hours is required for successful completion of internship. Must also maintain a valid drivers license. Must have the ability to follow oral and written instructions. Must be able to climb ladders/stairs, lift and carry crates/ animals/feed weighing 70lbs., operate mowers, handle fire hose for cleaning, operate weed eaters, load and operate wheel barrows loaded up to 150 lbs., be agile and flexible to maneuver in and around animals within exhibits, corrals and holding areas. Must have strong communication skills as speaking to the general public is required. May be asked to complete season-long project as assigned by the Senior Animal Care Specialist and/ or the Director of Animal Programs. Health and Safety: Must maintain current tetanus vaccination (5years) and be willing to have annual TB test done. Must be able to lift and carry up to 70 lbs.

Big Cat Internship – Big Cat Rescue, Tampa, FL
For more information contact Scott Lope at (813) 323-5991 or email at catfoto1@aol.com. Four (4) positions available for ongoing three-month internships at TAOS-accredited non-profit big cat sanctuary. See www.bigcatrescue.org **Responsibilities:** Include, but are not limited to daily husbandry, exhibit cleaning, diet preparation, feeding, operant conditioning and behavior enrichment for the following species – lions, tigers, leopards, cougars, lynxes, servals, caracals, bobcats, lemurs and other exotic animals. We provide invaluable experience, on-site housing and utilities, safety training and educational materials. Advanced training and long-term employment opportunities exist for the right candidates.–Many of our interns have advanced on to careers in the animal field. **Requirements:** Applicant must be willing to work six days a week, some holidays and follow strict safety guidelines. Hard work ethic and love of animals more important than degree.

More Zoo vacancies can be seen by visiting: 1) American Zoo and Aquarium Association - Job Listings http://www.aza.org/JobListings/; 2) American Association of Zoo Keepers - Opportunity Knocks http://www.aazk.org/aazknew/animalKeepersForum/opportunity_knocks.asp; 3) European Association of Zoos and Aquaria - Vacancies http://www.eaza.net; 4) Australasian Society of Zoo Keeping (ASZK) http://www.aszk.org.au/Zoo%20Positions%20Vacant.htm; 5) Berufsverband der Zootierpfleger e.V http://www.zootierpflege.de/stellen/stellenzooseiten/STzoowebseiten.html; 6) Zoo Vets, Technicians and Interns http://www.aazv.org/job_openings.htm; and 7) Bird Jobs in the Field http://www.birdingonthe.net/mailinglists/BJOB.html

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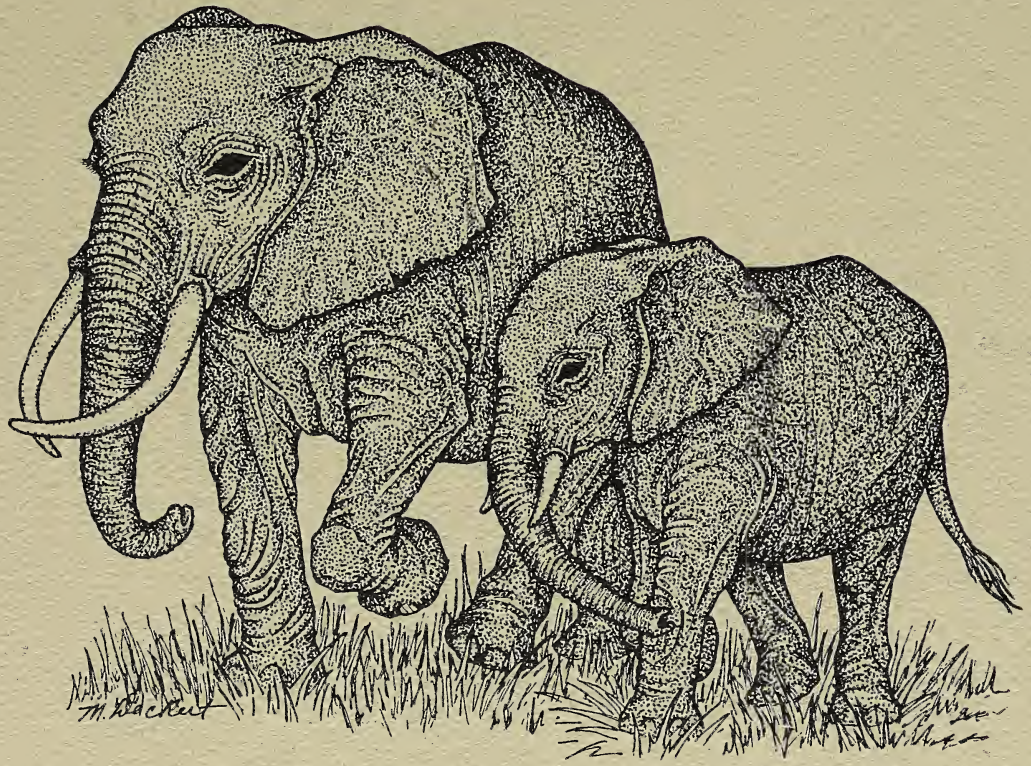

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MARCH 2006

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Phone: 1-800-242-4519 (U.S.) 1-800-468-1966 (Canada) FAX (785) 273-1980

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AKF **Managing Editor:** Susan D. Chan • **Associate Editors** • Kayla Grams, Grand Junction, CO; Mark de Denus, Reid Park Zoo; Jolene Hamrick, Tucson, AZ • **Enrichment Options Coordinators:** Dawn Neptune, Utah's Hogle Zoo & Rachel Daneault, Disney's Animal Kingdom • **Legislative/Conservation Outlook Column Coordinator:** Georgann B. Johnston, Sacramento, CA. • **ABC's Column Coordinator:** Diana Guerrero, Big Bear Lake, CA • **Reactions Column Coordinator:** William K. Baker, Jr., Little Rock Zoo

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30th Anniversary
1974 - 2004

About the Cover.....

This month's cover features an African elephant and her calf (Loxodonta africana) drawn by Mary Deckert, a Docent at the Los Angeles Zoo, Los Angeles, CA. Elephants live in close-knit family groups with an older female, called an matriarch, as their leader. The birth of a new calf is reason for great excitement within the herd, and younger females may serve as "aunties" helping to watch over and care for the calf. Females calves will remain within their natal herd, but males will leave the group prior to becoming sexually mature and will often wander for some years in small bachelor groups. Adult males do not live full-time with the herd, but come in and out of the herd as the various females comes into estrus. Long-term droughts, such as is currently being experienced in Kenya, are hard on elephant herds, causing them to sometimes wander into populated areas in search of water. Droughts are particularly tough on the infants and young elephant that often do not survive these harsh conditions. Most herds have a home range of some 10-29 square miles; adult males may have a range 20 times as large. Elephant populatins once numbered 10 million, but because of ivory poaching and habitat denegration due to human development, the African elephant population has dwindled to about half a million. They are listed on Appendix II of CITES (threatened), as Endangered by the IUCN, and Threatened by the USFW. Thanks, Mary!

Animal Keepers' Forum publishes original papers and news items of interest to the animal keeping profession. Non-members are welcome to submit articles for consideration. Articles should be typed or hand-printed and double-spaced. Authors are encouraged to submit their manuscripts on a disk as well as in hard copy form. Manuscripts submitted either on disk or electronically as attachments to an email should be submitted in Microsoft WORD. All illustrations, graphs, charts and tables should be clearly marked, in final form and should fit in a page size **no greater than** 5.5" x 8.5" (14cm x 22cm). Literature used should be cited in the text (Brown, 1986) and alphabetically in the final bibliography. Avoid footnotes. Include scientific name (as per ISIS) the first time an animal name is used. Thereafter use common name. Use metric system for weights and measurements (standard equivalents may be noted in parenthesis). Use the continental dating system (day-month-year). Times should be listed as per the 24-hour clock (0800, 1630 hrs. etc.). Glossy black and white **or** color prints (minimum size 3" x 5" [8cm x 14cm]) are accepted. Clearly marked captions should accompany photos. Please list photo credit on back of photo. Photographs may be submitted electronically as either JPEG or TIFF file attachments.

Articles sent to *Animal Keepers' Forum* will be reviewed by the editorial staff for publication. Articles of a research or technical nature will be submitted to one or more of the zoo professionals who serve as referees for *AKF*. No commitment is made to the author, but an effort will be made to publish articles as soon as possible. Lengthy articles may be separated into monthly installments at the discretion of the editor. The editor reserves the right to edit material without consultation unless approval is requested in writing by the author. Materials submitted will not be returned unless accompanied by a stamped, self-addressed, appropriately-sized envelope. Telephone, fax or email contributions of late-breaking news or last-minute insertions are accepted as space allows. Phone 1-800-242-4519 (US); 1-800-468-1966 (Canada); FAX (785) 273-1980; email is akfeditor@zk.kscoxmail.com<

Deadline for each regular issue is the 10th of the preceding month.
Dedicated issues may have separate deadline dates and will be noted by the editor.

Articles printed do not necessarily reflect the opinions of the *AKF* staff or the American Association of Zoo Keepers, Inc. Publication does not indicate endorsement by the Association.

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Scoops & Scuttlebutt

From the Editor

This issue marks my 25th year as Editor of *Animal Keepers' Forum.* Looking back that amounts to some 300 individual issues totaling 9,000 pages (if figured at a median of 30 pages per issue) and somewhere between 4-5 million words. It has been an interesting journey, not only in the technology that has taken *AKF* from a mimeographed newsletter to a professional journal put together electronically, but also in having had the privilege of watching the zoo keeping profession develop and mature. So many people have helped *AKF* develop over the years and their individual contributions have always been appreciated by me as Managing Editor, but may have gone unnoticed by much of the AAZK membership. I'm talking not only about those people who have edited and coordinated columns over the years, but also all those out there who have contributed to the pages of the *Forum* over the years. Some have contributed full-length articles, others short items of interest, Chapter News, upcoming events information, etc. Still others have contributed through the exceptional artwork that has appeared on our *AKF* covers over the past 25 years. You have all been a part of this journey, and I thank you for your contributions, support, and ideas/suggestions. Hopefully the *Forum* has provided you with useful information you can take to your workplace. We hope it has helped you connect up with others in the field who may share your passion for a particular species.

Working under the deadlines for this publication has been interesting as I am always working a month or more ahead of where everyone else is in "real time". Editing *AKF* has also meant that there were only certain weeks out of any month that I could be away from the office for any extended period of time - a two-week vacation was indeed a luxury and took some pre-planning. I sometimes wonder when I retire how long it will take me to get used to the idea of not having the deadline I have worked with for the past 25 years. That in itself should be an adventure!

Undoubtedly many changes will continue to occur in *AKF* as desktop publishing technology continues to advance and, in the coming years, as new staff comes onboard. Make it part of your future plans to be a contributor, share what you know and have learned. And thanks for the memories. --*Susan Chan*

Study Endangered Cats in Mexico

The Dallas Zoo is currently accepting applications for its 19th Wildlife Research Expedition to the Los Ebanos Ranch in rural northeastern Mexico. From May 13-26, a small group of expedition participants will study the behavior and ecology of small, endangered cats and birds of prey. The Dallas Zoo's Wildlife Research Expeditions offer paying volunteers a chance to work in the field on research projects or conservation programs. Five to seven individuals will be chosen to participate in the research study in Mexico.

The participants, working with field biologists and local assistants, will help capture and radio-collar ocelots and jaguarundis and will aid in radio-tracking the cats to determine their home ranges, habitat use and population densities. Populations of small wild cat species have declined dramatically in the United States and Mexico because of human encroachment and loss of habitat. This research study will help scientists develop a conservation strategy to preserve these cats in the wild. A second element of this Wildlife Research Expedition will be capturing raptors, or birds of prey, to assess their migratory patterns and nesting behaviors. Participants will take data on the birds, band them and release them.

The study site is the privately-owned Los Ebanos Ranch on the Gulf of Mexico in Tamaulipas. The ranch includes 2,000 acres of tropical deciduous forest, 500 acres of mangrove forest, 1,500 acres of grassland and more than two miles of undeveloped beach. The ranch is also home to many species of exotic birds, including Amazon parrots. No experience is necessary; on-site training will be provided. Conditions on the ranch are luxurious for a field study! Participants will stay in attractive

lakeside bungalows with toilets, showers and electricity. The ranch cooks prepare three meals each day, and water on the ranch is purified well water.

The trip will be led by Sue Booth-Binczik, research technician at the Dallas Zoo. The on-site project leader is field biologist Arturo Caso, who has been studying endangered cats in Mexico for many years. The cost of the trip is $1,700, including roundtrip transportation to the study site from Harlingen, Texas. (Participants must get to Harlingen on their own.) Some trip expenses are tax-deductible. For more information, contact Dr. Booth-Binczik at 214-671-0777 or sbooth@mail.ci.dallas.tx.us.

Chester Zoo Announces 2006 Richard Hughes Scholarship Award

Chester Zoo is a leading Zoological Garden in the U.K. actively involved in the conservation of threatened species, habitat support, scientific study and the provision of education and recreation to the general public. In February 2001 Richard Hughes, a senior keeper at Chester Zoo, tragically lost his life working with the elephants that he loved. In memory of Richard Chester Zoo have dedicated an annual scholarship award to support individuals wishing to undertake activities or projects concerned with elephant management, welfare and conservation.

The scholarship is open to applications for any type of activity or project that deals with issues of elephant management, welfare or conservation either overseas or in the UK. Proposals are encouraged from individuals from any relevant field who have an interest in elephants, from animal keepers and researchers to students. The Scholarship aims to help young people to become involved with elephant-related interests beneficial to their career or personal development, and to elephants. Details we require for application include an outline of the project, aims and a statement of its relevance. Clearly, feasibility will be an important criterion when judging the submitted proposals. The North of England Zoological Society expects those awarded the scholarship to uphold the high standards that it expects of its own employees and to be fully acknowledged in any presentations/publications. It is a condition of the scholarship that the Zoo receives a full report on the completed project and copies of any resultant publications. The recipient may also be requested to provide a brief article for the Zoo magazine or to give an oral presentation on the completed project.

Scholarships will be awarded up to the value of £1000 (approx. $1700 US) for which the Society may require receipted expenses (Any special equipment purchased will remain the property of the society). Application forms are available from Scott Wilson, Conservation Officer, The North of England Zoological Society, Chester Zoo, Caughall Road, Upton by Chester, Cheshire, CH2 1LH or via email from s.wilson@chesterzoo.org. ***Applications should be received no later than Friday 21 April 2006.***

PJC Offers Zoo Animal Technology Program

The Pensacola Junior College zoo animal technology program is now accepting applications for entry in August 2006. This is a two-year associate of science degree program offered as a cooperative effort of PJC and The Northwest Florida Zoological Park and Botanical Gardens in Gulf Breeze FL. Our program includes general education, a comprehensive series of academic courses in animal biology, specialized zoo topic courses, and practical animal care, medical husbandry, and exhibit repairs skills courses. The degree articulates into the Zoo Science B.S. program at University of West Florida (also in Pensacola) if desired. Application packets may be obtained from the PJC biology department secretary at (850) 484-1168 or on the web at http://itech.pjc.edu/jkaplan/zooschool/ and further information is available by contacting Joyce Kaplan, PJC Zootech Director, at jkaplan@pjc.edu or (850) 484-1164.

Donation Acknowledgement

The AAZK Board and Administrative Office staff would like to thank member Andy Henderson for his donation of $100.00 to the general operating fund of the Association. Because AAZK cannot operate solely on the income generated from membership fees, we depend on such additional support from Chapters, organizations, and individual AAZK members to help us achieve our projects and programs. Thank you.

Update from the New Orleans AAZK Chapter and Audubon Institute

from New Orleans Chapter President Jaime Hayslette

AAZK New Orleans Chapter Officers for 2006 are:

President..... Jaime Hayslette
Vice President.....Tyrene Fayard
Secretary.....Amy Davis
Treasurer.....Cyndi Ratliff

Our past president, Michelle Muniz, left the Audubon Zoo in May 2005 to pursue another career. Michelle had over five feet of water in her home in Slidell, LA and is in the process of rebuilding.

Jaime Hayslette, past Vice President is now the president of AAZK New Orleans. She evacuated to Memphis, TN where she reunited with conference evacuees. Her home had minimal damage and she continues to work at the Audubon Zoo as a primate keeper. If anyone has questions for Jaime or the New Orleans Chapter please email her at jhocean@hotmail.com.

Gretchen Jeff, our 2005 secretary, is now a keeper at Zoo Atlanta. She lost her home during the hurricane, but is in good spirits and enjoying her life with her family in Atlanta.

Our 2005 treasurer and conference chair, Kathy Leblanc, is no longer working at the Audubon Zoo but remains in LA. Her home and belongings were destroyed during the storm. Kathy was at the Sheraton Hotel days before the storm hit, entertaining conference attendees who were going on the pre-conference trip. She did not have time to retrieve any of her belongings, valuables, or precious memories from her home because she was dedicated to getting everyone to safety. Kathy, along with two Species Survival Center staff (Jeff Vaccaro and Kelly Trimbel) drove conference evacuees to Memphis, TN and out of Katrina's devastation. If anyone would like to reconnect with Kathy, her email is zookat@cox.net. *(Editor's note: see message from Kathy to AAZK membership following this article.)*

Jeff Vaccaro continues to work as a curator at the Audubon Species Survival Center. He assisted in the evacuation of several conference attendees. If anyone would like to email Jeff, his email address is jvssc@yahoo.com.

Kelly Trimbel, who also helped with conference attendee evacuation, continues to work as a keeper at the Audubon Species Survival Center.

Audubon Update

As many of you know, the Audubon Nature Institute was greatly impacted by Hurricane Katrina. In all, 700 employees from the Audubon Zoo, Audubon Aquarium of the Americas, Audubon Louisiana Nature Center, and Species Survival Center were let go after the storm. Each facility is still trying to get back on its feet. It has been a difficult five months and the journey ahead guarantees to be a wild one through uncharted waters.

We continue to live in a state of uncertainty. The city is starting to come back to life but it will never be the city we once knew, grew up in, or have grown to love. Everyday we are reminded of this tragic event by seeing gutted houses, vacant slabs, closed buildings, and blue tarps. It is sometimes hard to stay positive and focused on what really matters. But fortunately we have some amazing staff at our facilities. They are individuals who are determined to rise above the negative. I have witnessed many people putting others' needs first before their own. Many employees are still looking for a place to live and are rooming with friends and family. With all the work they still have to do with their destroyed homes, they show up to work everyday ready to give their animals the best care possible and give the visitors at the zoo and the residents of Louisiana a place to go, and to forget about reality for awhile. We have all laughed and cried together. It was very overwhelming to reunite

with co-workers after the storm and to hear each individual story of survival, motivation, and heartbreak. But even more devastating was not having the chance to say goodbye to the hundreds of Audubon Nature Institute employees who were let go after the storm and scattered across the United States due to evacuation.

The Audubon Zoo reopened to the public over Thanksgiving weekend. We are currently only open on Saturdays and Sundays, but come March 1, 2006 we will be open Wednesday through Sunday. We are slowly starting to hire staff back and look forward to starting over.

We learned such a wealth of information after the hurricane and during the first few weeks after the storm (such as supplies that we should have had, communication problems, evacuation plans, etc). This is knowledge that will forever change the way we prepare for another hurricane.

Our AAZK Chapter
Our AAZK Chapter has definitely shrunk since the storm. Several of our members are now working at other zoos and aquariums. Most of our Chapter is made up of individuals from the zoo, but we hope to obtain more input and membership from our other Audubon facilities. We do currently have one keeper from the Audubon Species Survival Center who has been very active in our Chapter. Her name is Deirdre Havnen.

With the help of AAZK, Inc, we are still handling conference refunds. Thank you to all individuals who donated their conference fees to our Chapter. So far we have received $10,000, which we used to purchase 100 - $100 gift cards. These cards were given to both former and current Audubon Nature Institute employees who were greatly affected by Hurricane Katrina. If anyone is still in need of a refund or would like to donate a portion of, or all of their conference fees to National and our Chapter, please contact Ed Hansen from AAZK, Inc. Thank you to all the AAZK Chapters that donated funds to our conference and, when the conference was cancelled, let us keep the money for a Katrina Relief Fund. Thank you to the Dallas AAZK Chapter for the generous additional donation of $1464 for the Katrina Fund. Our Chapter used the money to buy 14 more $100 gift cards for those in need.

The Future of AAZK New Orleans
We are working very hard to start back up with our fundraisers. Due to the zoo being closed for several months we unfortunately missed out on our two biggest fundraisers of the year- Boo at the Zoo (glow necklace sales) and Swamp Fest (animal artwork, tattoos, and chocolate sales). We are currently selling animal artwork, mostly Orangutan Paintings, in our gift shop. We hope to continue with other past fundraisers such as selling Worlds Famous Chocolate candy bars, 50/50 raffles, Elephant Melon Stomp, book sale, Shadow the Keeper, cartridge recycling, caricatures, etc. Through fundraising we want to continue to support local organizations with our Katrina Relief Fund, help conservation organizations, and to assist AAZK members with continuing education. We are looking forward to sending several of our Chapter members to the 2006 conference at the Lincoln Park Zoo. See you all in the windy city...

A Message from the 2005 Conference Chair.....

In the last four months, many lives have been changed forever, mine included. Although I am no longer affiliated with Audubon Zoo, my heart will always be with the zoo community. I want to extend my sincerest appreciation to everyone for all the support and assistance given to the AAZK, New Orleans Chapter and its members during this most difficult time in our lives. To thank individuals would surely mean that I would leave someone out. Thank you to the National Office, the Board of Directors and members of Chapters from all over for your help and generosity.

I would like to keep in contact with the friends I've made throughout my zoo career. My e-mail address is zookat@cox.net. I look forward to hearing from all of you and I hope to see you all in Chicago in September.

Much love to all,

Kathy LeBlanc

Coming Events

Techniques for Butterfly Conservation and Management - 24-26 April, 2006 in Gainesville, FL. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

AZA Western Regional Conference - 24-29 April 2006 - hosted by Vancourver Aquarium in Vancouver, British Columbia. See http://www.aza.org/ConfWork/AboutRegWork/#fut

Second International Congress of Zookeeping (ICZ) 7-11 May 2006 in Gold Coast, Queensland, Australia. Visit website: http://www.iczoo.org< for latest information or send a blank e-mail to ICZ_News-subscribe@yahoogroups.com for regular updates on this event or contact Liz Romer at slromer@bigpond.com

Tenth Elephant Ultrasound and Veterinary Procedures Workshop - 17-20 May, 2006 at Riddle's Elephant and Wildlife Sanctuary, Greenbriar, AR.For more information, or to request a registration packet, please see www.elephantsanctuary.org<

Third Protected Contact Training and Enrichment Workshop - 24-28 May 2006. Hosted by Zoo Atlanta, Atlanta, GA. Presented by Active Environments. Workshop curriculum will focus on the fundamentals and practical application of protected contact as a comprehensive system for the management of captive elephants through classroom instruction, discussion, group activities, demonstrations, and hands-on training opportunities. Registration is limited to 25 participants. For further information contact: Active Environments, Inc., 7651 Santos Rd., Lompoc, CA 93436; Tel: 805-737-3700; Fax - 805-737-3705; email - active_environs@ix.netcom.com<

2006 International Gorilla Workshop - 23-26 June 2006 at Paignton Zoo, Devon, England. Paignton Zoo will be host. We would like to invite gorilla workers from all diciplines to register. Further information available at http://www.paigntonzoo.org.uk/gorillas/gorillaworkshop.htm

33rd AAZK National Conference – 15-20 September 2006. Hosted by the Lincoln Park Zoo AAZK Chapter and the Lincoln Park Zoo, Chicago, IL. See information at their website www.aazk2006.org<

AAZV Annual Conference 20-24 September 2006 in Tampa, FL. For further informatin please visit http://www.aazv.org

Animal Training Seminar - 18-22 September, 2006 at Shedd Aquarium, Chicago, IL. Five-day seminar on training techniques with Ken Ramirez. For more info and questions, contact Renee Birk at rbirk@sheddaquarium.org or call (312) 692-3328. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

AZA Annual Conference - 25 - 30 September 2006. Hosted by Busch Gardens, Florida Aquarium, & Lowry Park Zoo, Tampa, FL. See information at their website http://www.aza.org/ConfWork/AboutAnnualConf/#fut

Managing Animal Enrichment and Training - 7-13 October, 2006 in Portland, OR. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

27th Elephant Managers Association Conference 15-18 October 2006,in Albuquerque, NM. Hosted by the Albuquerque Biological Park. Pre-conference trips are to the International Balloon Fiesta, 14-15 Oct; post conference trip to Santa Fe and up the tram to the crest of the Sandia Mountains. For more information see www.elephant-managers.com , or call Lynn Tupa at 505-764-6216 or Gwen Dragoo at 505-764-6264.

Zoos and Aquariums Committing to Conservation - 26-31 January 2007 – Hosted by the Houston Zoo, Houston, TX. ZACC is a bi-annual event that promotes the role of zoos and aquariums in supporting conservation activities worldwide, both at their institutions and in the field. Conference participants include representatives from zoological institutions, international conservation organizations, local non-governmental organizations, government agencies, funding agencies and, most importantly, field biologists and conservationists. Bringing together individuals from different countries and disciplines, ZACC conferences help to build a stronger and more effective global network for wildlife and habitat conservation, and to establish direct links to zoos, aquariums, and their constituencies. For more information you may contact zacc@houstonzoo.org or phone 713-533-6745.

Post Your Coming Events Here - email to:

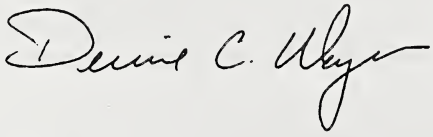
akfeditor@zk.kscoxmail.com

From the President

I would like to take a moment to wish a colleague and fellow Board of Directors member a fond farewell and best of luck, as well as another moment to welcome a new Board member. It is with heavy heart that I wish Kevin Shelton best of luck in his new profession. Kevin has left the field of zoo keeping, pursuing other interests. He has served the Board for roughly the last five years and he has served the Association well. Kevin has provided your Association with a great deal of his time and effort and has been instrumental in many of our programs. Personally, I will miss him and his many questions and views especially during Director's meetings. Never again will I say "Okay that wraps up that topic", only to hear, "But.....". Kevin is staying active in the Association but not at the professional level, and he will continue to help on improvements with the website. So he's not truly gone. I know he will continue to contribute, and I look forward to those contributions.

While I'm sad that Kevin has left the Board, I'm very excited to announce that the member taking his place is Norah Farnham from the Woodland Park Zoo in Seattle. Because of her vote total in last year's election, Norah was next in line for a seat on the AAZK Board of Directors. For those of you who don't know Norah let me just say that she will be a welcome addition. She has been very active in AAZK for many years and I've had the pleasure of speaking with her at many past conferences. I'm looking forward to working with her on the Board. Norah also currently represents AAZK on the International Congress on Zookeeping (ICZ) steering committee. She is very committed to the ideals of AAZK and will represent you well. So welcome Norah!

Take care and be safe.



Denise C. Wagner
President, AAZK Inc.

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AAZK Award Nominations Are Now Being Accepted for 2006

The AAZK Awards Committee is accepting nominations for the **Lifetime Achievement Award (LA)** the **Meritorious Achievement Award (MA),** and the **Lee Houts Environmental Enrichment (LHEE) Award**. Nomination criteria for these three awards are listed below. Nomination criteria for the **Jean M. Hromadka Excellence in Zookeeping Award (EZ) The Certificate of Merit for Zoo Keeper Education (CMZE),** and **The Certificate of Excellence in Exhibit Renovation (CEER)** were published in the February 2006 issue of *AKF*. These awards will be presented at the 2006AAZK Conference in Chicago, IL The deadline for all award nominations is **1 June 2006**. Information concerning the qualifications, nomination procedure, selection procedure and an explanation of the awards may be obtained by contacting Janet McCoy, Chair, AAZK Awards Committee, Oregon Zoo, 4001 S.W. Canyon Rd., Portland, OR 97221; email - mccoyj@metro.dst.or.us

Lifetime Achievement (LA) Award

The American Association of Zoo Keepers, Inc. (AAZK) is the administering organization of the Lifetime Achievement Award presented by the AAZK Awards Committee. This award is to be given at the end (retirement) of a keeper's carerer. The purpose of the award is to recognize outstanding commitment to professionalism as a zoo keeper over a long period of time, and significant contributions to the community.

The Lifetime Achievement Award was established by the 1993 Awards Committee, Janet McCoy, Chair. Rachél Rogers proposed the award to the AAZK Board of Directors. The award is presented at the annual AAZK National Conference.

Qualifications:
1. The nominee **must** be a full-time keeper retiring from a career of zoo keeping and employed in any North American zoological institution, aquarium or related facility.
2. The nominee must have been employed at least twenty years on permanent status at a zoo, aquarium or related facility.
3. The nominee **must** be nominated by **two** of his or her peers who have also been employed at that same zoo, aquarium or related facility. Supporting nominations may be submitted by management personnel from the same institution.

Nomination Procedure:
1. List name, position, institution's name, address, phone and Director, years of service in the field and the recommendation of peers or colleagues.
2. List and **document** outstanding achievements: exhibits, breeding, education, project participation, papers, etc. **Verification** of these facts must be signed by the zoo director, curator, or immediate supervisor of the individual being nominated.
3. Describe extra activities outside of zoo, aquarium or related facility work: working with conservation groups, animal related youth groups, rehabilitation wildlife officials, etc.
4. Paragraph of why the nominee fits the criteria.
5. Provide 3 - 5 references.
6. Deadline for nominations is **JUNE 1st** of each year.

Selection Procedure:
The Awards Committee, consisting of five keepers, will independently review each nominee.

Meritorious Achievement (MA) Award

The American Association of Zoo Keepers, Inc. (AAZK) is the administering organization of the Meritorious Achievement (MA) Award presented by the AAZK Awards Committee. The purpose of the award is to recognize professional members of AAZK and AAZK Chapters, in good standing in the Association, for their extra work performed outside the keeper level of performance. This includes keeper participation in AAZPA Bean Award projects, dedicating time to other zoo related projects (conservation, wildlife education and individual breeding projects) and educating others in such programs as Scout Patch Programs.

The MA was established in 1982, by Mike Crocker, 1980-1985 CHAIR, as a means of recognizing work done outside of the scope of the Excellence in Zookeeping award. It is the only award presented by the awards committee that you have to be a member of the Association to receive. The award is presented at the annual AAZK National Conference.

Qualifications:

1. The nominee must be a full-time keeper and professional AAZK member employed in any North American zoo, aquarium, or related facility. In the case of an AAZK Chapter, it must be 'in good standing' having an up-to-date charter with the AAZK.

2.The nominee must have been employed at least one year on a permanent basis at a zoo, aquaium or related facility. In the case of an AAZK Chapter, it must have been active for at least one year.

3.The nominee must be nominated by his/her peers or colleagues, while supporting nominations may be submitted by other zoo, aquarium or related facility personnel. The nominators need not be from the same institution.

Nomination Procedure:

1.List name, position, institution's name, address, phone and Director, years of service in the field and the recommendation of a peer or colleague.

2.List and **document** the outstanding achievements: AAZPA Bean Award project participation, exhibits, breeding, conservation, etc.

3.The deadline for nominations is JUNE 1st of each year.

Selection Procedure: The Awards Committee, consisting of five keepers, will independently review each nominee.

The character of the award includes either a plaque or certificate, letter of notification to the institution's director and national recognition by professional journals. Such journals include: the American Zoo and Aquarium Association (AZA) and the Canadian Association of Zoos and Aquariums (CAZA) Newsletters, Animal Keepers' Forum (AAZK), Awards, Honors and Prizes: Volume 1; United States and Canada. The latter is published by Gale Research Company based in Wheaton, MD and found in medium to large sized libraries across the U.S. and Canada.

Deadline for Nominations is 1 June 2006

Lee Houts Environmental Enrichment (EE) Award

The American Association of Zoo Keepers, Inc. (AAZK) is the administering organization of the Lee Houts Environmental Enrichment (LHEE) Award presented by the AAZK Awards Committee. The purpose of the award is to recognize outstanding keeper-initiated contributions to the art and science of environmental enrichment. It is hoped that recognition of outstanding efforts by keepers to improve animal care and welfare through environmental enrichment will provide incentive to keepers to continue to be leaders in this important endeavor.

TheEnvironmental Enrichment Award was established in 2001 by the AAZK Enrichment Committee. Lee Houts proposed the award to the AAZK Board of Directors. The award was renamed in Lee's memory, and to honor her many contributions to the field of enrichment, following her death in 2005. The award is presented at the annual AAZK National Conference.

Qualifications:

1. The nominee may be an individual, group, project or program that has improved the well-being of an animal or group of animals through outstanding keeper-initiated enrichment techniques.
2. Nominees must have excelled in one or more of the following categories:
   - -Innovative techniques developed, implemented and evaluated.
   - -Creative fundraising efforts implemented which increased the availability of enrichment items fot staff to utilize.
   - -Motivation of staff, volunteers and peers through development of an enrichment infrastructure that increased participation in in-house programs or disseminated information to the zoo community to advance the art and science of environmental enrichment.
3. The nominee must be nominated by a keeper.

NominationProcedure:

1. List name of keeper(s) who initiated the enrichment, institution's name, address, phone and Director.
2. List and document outstanding achievements in one or more of the categories listed under qualifications. **Verification** of these facts must be signed by the zoo director, curator, or immediate supervisor of the nominee.
3. The deadline for nominations is JUNE lst of each year.

Selection Procedure: The Awards Committee, consisting of five keepers, will independently review each nominee.

The character of these three award includes either a plaque or certificate, letter of notification to the institution's director and national recognition by professional journals. Such journals include: the American Zoo and Aquarium Association (AZA) and the Canadian Association of Zoos and Aquariums (CAZA) Newsletters, Animal Keepers' Forum (AAZK), Awards, Honors and Prizes: Volume 1; United States and Canada. The latter is published by Gale Research Company based in Wheaton, MD and found in medium to large sized libraries across the U.S. and Canada.

Award Nominations should be submitted to: Janet McCoy, Awards Chair, The Oregon Zoo, 4001 SW Canyon Road, Portland, OR 97221.

AAZK Announces New Members

Katrina Bell, **Cape May Co. Park & Zoo (NJ)**; Jennifer Lyn Conan and Donald Middaugh, **Catoctin Wildlife Preserve & Zoo (MD)**; Joseph Fortunato, **no zoo listed (PA)**; Coral Goad, **The Maryland Zoo in Baltimore (MD)**; Kathy A. Cunningham, **Greenville Zoo (SC)**; Tanya Scheidegg, **no zoo listed (FL)**; Rebecca Kloepfer, **Lion Country Safari (FL)**; Steve Martin, **Natural Encounters (FL)**; Heidi Gillum, **Central Florida Zoo (FL)**; Dale Morano, **no zoo listed (AL)**; Michelle Kohlhagen, **Birmingham Zoo (AL)**; Shannon Anderson-Morales, **Memphis Zoo (TN)**; Alexis Dufilho, **no zoo listed (KY)**; Robyn Kaltenbach and Nicole L. McClellan, **Cleveland Museum of Natural History (OH)**; Ann Marie Sylvester, Diana Grassinger, Theresa Donarski and Cydney Peterson, **Racine Zoo (WI)**; Larry Fries, **Cedar Cove Feline Conservation Park (KS)**; Ned Stichman, **no zoo listed (KS)**; Jennie Latino, **Brec Baton Rouge Zoo (LA)**; Mindi Avery, **Cameron Park Zoo (TX)**; Joy Oria, Marjorie Erickson and Kevin Hodge, **Houston Zoo (TX)**; Laura Keefe, **Cheyenne Mountain Zoo (CO)**; Scott Klein, **Pueblo Zoo (CO)**; Mandy DuMong, **Charles Paddock Zoo (CA)**; and Peter McLane, **Woodland Park Zoo (WA)**.

Renewing Institutional Members

Buttonwood Park Zoo
New Bedford, MA
David Raboy, Director

Henry Vilas Zoo
Madison, WI
Jim Hubing, Director

Renewing Contributing Members

June L. Masek
Cleveland Metroparks Zoo
Cleveland, OH

Panda Births Set Record

A record 21 surviving baby giant pandas (*Ailuropoda melanoleuca*) were born in China's zoos and breeding centers in 2005. The previous record was set in 2003, when 15 babies born in captivity survived.

China has 183 pandas living in captivity, according to the official Zinhua News Agency. It reports another 24 live in nine zoos in the U.S., Japan, Germany, Austria and Thailand. Pandas are an endangered species.

A recent article in *Parade Magazine* reported that researchers have discovered important facts about the animals' sex life, and that has encouraged Chinese and U.S. scientists to try to learn more. They now use global-positioning systems and other high-tech devices to observe and track these shy creatures. Wei Fuwen of the Chinese Academy of Sciences says tracking pandas "with advanced technologies and observing their sexual activities might help us find new ways to avoid their extinction".

But the $660,000, three-year study may find little to help as some experts say a lack of interest in sex is one reason the species is endangered. Previous efforts to make pandas more amorous with specially designed "panda Viagra" or "panda porn" had little impact on reproductive rates.

In the U.S., there are pandas at Zoo Atlanta, the Memphis Zoo, National Zoo and the San Diego Zoo. According to the ISIS website, offspring have been produced at the latter two facilities.

Chapter Challenge 2006!

In our efforts to keep cost to the delegates to a minimum, the Lincoln Park AAZK Chapter will be participating in the Chapter Challenge. If your AAZK Chapter contributes $250.00 or more to support the 2006 National AAZK Conference, they will be entered into a drawing with the winning AAZK Chapter receiving one full registration and one double occupancy room for five nights at the Millennium Knickerbocker Hotel (Sept. 15-19). Letters with more details will be mailed to all AAZK Chapters soon. Good luck and start planning to meet the Challenge!

Deadline to be eligible for the drawing is 1 August 2006.

Though we haven't confirmed our pre- or post-conference trips, the tentative dates that they will take place are: Pre-conference trip on 14 September, and the post will be on either 20-21 September, or possibly 20-22 September.

Registration fee for the 2006 conference will be $175.00 that includes a $50 donation to AAZK National. The cost of Conference Proceedings is not included in the registration fee.

This conference is, of course, a costly production. Please have your Chapter or group consider either sponsoring the hospitality suite or a break, or just making a donation to help cover expenses. Any donation will be greatly appreciated.

Our conference hotel is in the heart of Chicago and downtown attractions and is located just 1.5 miles from the zoo and the Art Institute. It is conveniently close to such attractions as the Shedd Aquarium, the Field Museum of Natural History and the Adler Planetarium. All three are accessible by a city bus that stops right in front of the hotel.

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Email: knickerbocker@mhrmail.com

Hotel Rates:

$175.00 per night for a Double
$185.00 per night for 4 people

Keep checking our conference website for updates and for information or contacts - www.aazk2006.org

Windy City - - - Lincoln Park Zoo in 2006

The Lincoln Park AAZK Chapter, along with Lincoln Park Zoo, eagerly anticipates the migration of keepers from all over the country to the Windy City.

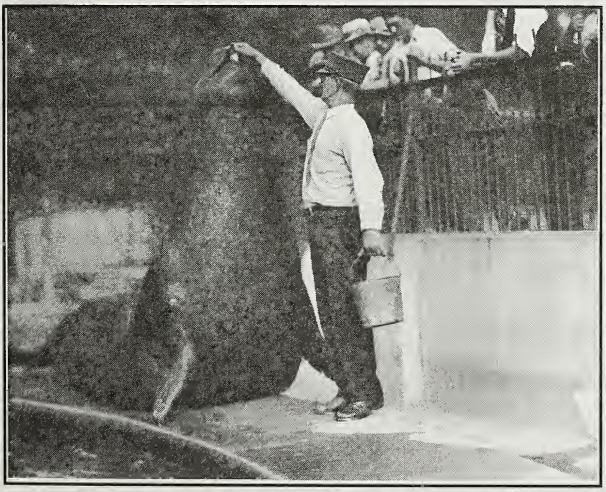
I am pleased to announce our new Chapter President Leslie Lurz and the continuing commitment of Treasurer Cindy Swisher and Secretary Diana Villafuerte. I have accepted the role of Vice President/Chairperson for the 2006 Conference. We're continuing to raise funds to provide you with the ultimate amenities, ensuring your stay in Chicago is a memorable one.

Since Lincoln Park Zoo began in 1868 with a pair of swans, it has evolved into one of the jewels of Chicago. We are proud of 135 years of progress and anxious to share it with you.

Early cyclists enjoy a day at the Lincoln Park Zoo in Chicago.

In the last four years alone we have opened four state-of-the-art buildings including Regenstein African Journey, which has won several awards for exhibit design; the Pritzker Family Children's Zoo, exhibiting animals indigenous to North America; and the Regenstein Center for African Apes, which has been featured on several television programs as one of the most advanced captive-animal environments in the country.

The city of Chicago, still beaming after its White Sox clinched the World Series title, will offer delegates a variety of arts, history and entertainment. If you need a primer on the City by the Lake, rent "Blues Brothers," "Ferris Bueller's Day Off" or "Return to Me," which was filmed at the zoo and starred one of our resident silverbacks, Kwan.

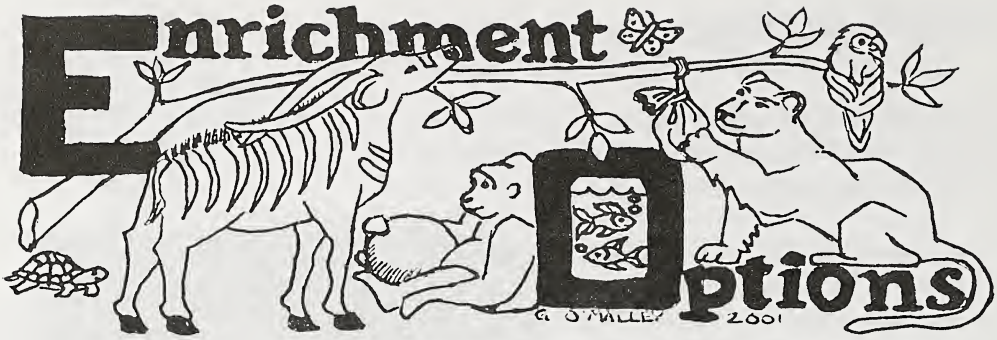


Note "formal" dress of zoo keeper - ties will be optional in 2006!

So, please continue to visit www.aazk2006.org for updates, or call the exclusive Chapter line, (312) 742-7749, which provides up-to-the-minute announcements and has messaging capability.

Kris Fraas

2006 AAZK National Chairperson
Lincoln Park AAZK Chapter



EO Editors - Dawn Neptune, Utah's Hogle Zoo
and Rachel Daneault, Disney's Animal Kingdom

From the Editors: Enrichment Options is pleased to offer Part 3 of a wonderful three-part series focusing on the most important element of a successful enrichment program - involvement! These three installments highlight some creative ideas to increase enthusiasm and engage not only our animals but our staff, volunteers and visitors as well. We hope that this series inspires your own New Year's resolutions to promote enrichment at every level within your own facility. Have fun and have a very enriching 2006! See Part 1 on "Community Involvement in Behavioral Enrichment at The Phoenix Zoo" in the January 2006 issue of *AKF*. See Part 2 on "Get the Ball Rolling! How to Create the Framework for a Successful Enrichment Program" in the February 2006 issue of *AKF*.

Enrichment Day Success - Beyond Our Expectations!

By Carolyn Mathews-Borak, Carnivore Keeper
Houston Zoo Inc., Houston, TX

The organization of an Enrichment Day event can be beneficial for zoo guests, employees and animals. The Houston Zoo's annual Go Wild Enrichment Day is one such event. In addition to educating guests about the zoo's enrichment program, staff interest and participation in the program has increased zoo-wide.

In the spring of 2003 the zoo held an event called Go Wild weekend, which was expanded in 2004 when an educational segment was added to create Go Wild Enrichment Day. The goal of this event was to educate guests regarding the importance of enrichment by introducing them to the enrichment program at the Houston Zoo. The Houston Zoo held its first annual Enrichment Day on Saturday April 3, 2004. This event was organized by the animal sections and development department. The development department arranged the advertisings as well as much of the event planning. Chick-fil-A® generously sponsored the event. They helped to advertise by distributing coupons for entry to the zoo that day. The Public Affairs Director provided information to the media about our event. During our event not only animal sections participated but also other departments, such as Horticulture, Commissary, Development, Education, Green Practices and Ranger (security) staff.

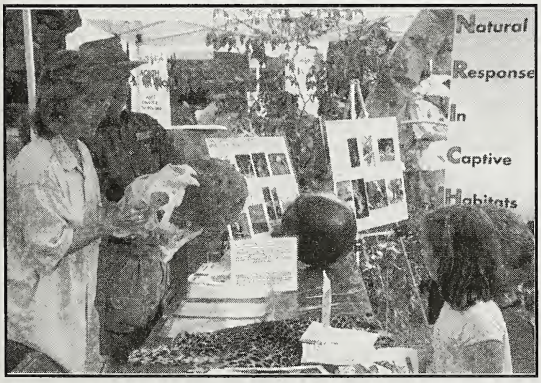
The Events Department, the animal sections and a few other departments planned out plenty of activities for the day. The guests were given special maps indicating the location and times of all the events. There were about 40 enrichment demonstrations done at the animal exhibits with keepers and volunteers on hand to interpret. The Zoo Staff came up with an acronym to use on all of the graphics, ENRICH (**E**ncouraging **N**atural **R**esponses **I**n **C**aptive **H**abitats). This acronym was a uniform message that could be used to explain the theme of the event to the zoo's guests. It was decided to use a slogan that clearly explained enrichment.

As the guests entered the zoo they encountered booths that discussed why zoos enrich the animals, what enrichment is, and how they are enriched. The Green Practices committees set up a booth to show how many of the zoo's enrichment items come from recycled sources. The Horticulture Department brought up an abundance of fresh browse to show the guests. The Commissary staff set out examples of food enrichment and talked to the guests about their involvement in the enrichment program. A poster addressing the safety aspect of enrichment was also placed among these booths. A PowerPoint® presentation was designed by two of the zookeepers to show to the guests. It illustrated what enrichment is and was replayed several times throughout the day. Another booth was set up to talk about the animal training program at the zoo. At this booth a video was played that highlighted some of the zoo's training programs. There were also training paraphernalia set out for the guest to see and the training game was played with the children.

The education department also played a big role in the day's events. Some of their classes constructed enrichment items to be used on enrichment day. One of the items they constructed was a paper mache animal for the Komodo Dragon to tear up. This demonstration drew a large crowd that was then educated on the natural behaviors seen in the Komodo Dragons during enrichment activities.

Houston Zoo commissary staff talked to visitors about what animals eat and how food items are used in enrichment and training.

Several games were planned to get the guest more involved. The staff tried to provide games and activities that offered guests a personal experience relating directly to the activities and behaviors of the animals. For example one game encouraged the natural behavior of foraging. A plastic kiddie pool was filled with shredded paper and plastic fruits and vegetables. Then the guest could "forage" just like the zoo primates. There was also a table with puzzles for the guests to manipulate. This was then compared to some of the puzzle feeders and more complex enrichment given to the animals. Another game called "enrichment stinks" was set up. In this game there were several jars with scented cotton balls inside. The cotton balls had been scented with various odors, such as garlic, vanilla extract, perfume, etc. As the guest guessed which scent was in the jar volunteers talked about using scent enrichment with the zoo felines and the keepers did a scheduled demonstration at the Margay exhibit.



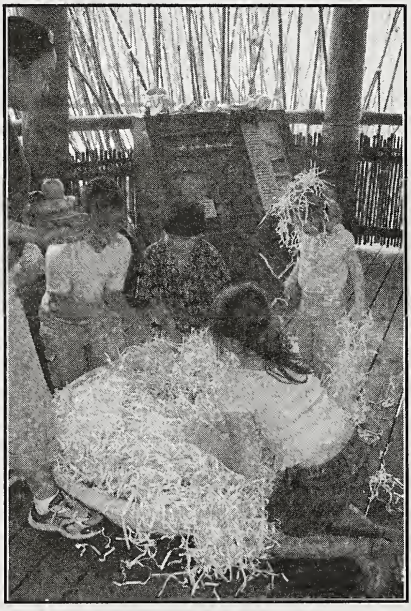
Houston Zoo staff and volunteers manned displays of animal artifacts and enrichment items to help guests better understand the importance of enrichment in captive exotic animals.

In a different game plastic bugs were tossed to children for them to catch. This was then compared to the Hornbills ability to catch bugs during flight. Other enrichment for the zoo guests included a magician, a juggler, musical performances and a giant inflatable slide out on the lawn.

A local pet store owner was invited to participate in Enrichment Day. He provided pre-approved and pre-selected enrichment items for the guests to purchase for the animals at the zoo. It was arranged so guests could tell us what animal they wanted to buy for and then they where shown an assortment of items. They chose an item to buy and, after purchase, the item was immediately placed in a bin labeled with the appropriate animal

section. The guests appeared eager to buy for their favorite animals. It was discovered that when a keeper could help interpret how the enrichment items were to be used the success of the booth increased.

Other non profit organizations were invited. Moody Gardens from Galveston, Texas designed a booth focusing on the enrichment program in their rainforest and aquarium exhibits. They also set up a fun activity for children that enabled them to make a painting just like the seals do with a special brush held in their mouth. (The brushes were sanitized between each artist.) Another organization that attended the event was the Houston SPCA (Society for the Prevention of Cruelty to Animals). They brought some toys for domestic animals and talked about the ways to enrich your pets at home. There were also representatives on hand from other wildlife organizations such as Texas Parks and Wildlife. They had a variety of hand outs with information explaining how to enrich your yard to attract native wildlife.



Children attending the Houston Zoo's Enrichment Day forage for food items in one of the hands-on learning experiences offered at the event.

There are several species of animals around the Houston Zoo that paint. Several paintings were completed and sold at a booth with the help of our local AAZK chapter. All of the funds collected at this booth were later distributed for the purchase of enrichment items. After the event the GHCAAZK (Greater Houston Chapter) accepted proposals and then awarded the money to the animal sections for purchase of the new enrichment items.

After the enrichment day event there was revived interest in restarting Enrichment Group meetings. Previously only animal section staff routinely attended but now representatives from other departments like education, horticulture, and ranger staff routinely attend.There is an increase in interdepartmental cooperation with more departments now providing their expertise to help develop new enrichment ideas as well as to help design exhibit renovations. Enrichment Day was intitally designed to benefit and educate our zoo guests, however the zoo staff have also seen benefits through the rewards of their own professional development. An enrichment day brings staff together for a common goal, inspiring all who participate to do the most for the animals under their care. Due to the success of this event the Houston Zoo plans to continue Go Wild Enrichment Day annually.

(Ideas appearing in this column have not necessarily been tested by the editors for safety considerations. Always think ahead and use good judgement when trying new ideas. You are invited to submit material for the Enrichment Options Column. Look in the January 2004 issue of AKF for guidelines for articles acceptable for this column's format or contact the editor at akfeditor@zk.kscoxmail.com for a copy of the guidelines. Drawings and photos of enrichment are encouraged. Send to: AKF/Enrichment, 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054, USA. Eds.)

REACTIONS

A Question and Answer Forum for the Zoo Professional on Crisis Management

By William K. Baker, Jr., Curator
Panthera Research, Maumelle, AR

Question
You have mentioned using unscented products on several occasions, why?

Comments
Honestly, it's based on personnel experience in the workplace. Over the years I have observed what could be described as negative experiences involving scented products that were worn by fellow staff members. On one occasion, one of my friends and fellow Zoo Keepers was working with a greater kudu herd. They just wouldn't leave her alone while she was servicing the exhibit, essentially following her everywhere she went. Turns out she had used an apple scented shampoo the day before.

On another occasion, a male greater kudu attempted to pull a Zoo Keeper through the feed slot while she was feeding out. Turned out she had used a banana-mango shampoo on her hair. After a short tug of war, I pulled her out with minimal loss of hair. On other occasions I have seen staff members followed by herds of gazelle when they used an especially fragrant soap, while the exact same soap elicited a negative response from oryx.

More recently, I observed an extremely negative response from a male cougar during a VIP tour. The visitors had been instructed not to wear any scented products; unfortunately one of them chose to wear a chamomile hand lotion. This was a totally new scent for the cat, and it was not received well at all when she approached the cage. He absolutely, positively did not care for it.

In retrospect, this makes perfect sense when you consider that using scents for positive environmental enrichment is an established practice in our field. Conversely, it's inevitable that eventually you will find a scent that invokes a negative response. The other component is that I'm allergic to a lot of the colognes, perfumes, and scented products that are on the market today. As a result, most of the products I use are unscented. I work on the approach that animals, like people, probably have preferences and allergies just like I do. Better to be safe than sorry.

Question
How often should we conduct safety inspections and what should we be looking for?

Comments
Ideally, the staff working their particular area or section should inspect all aspects of their workspace on a daily basis. This would include locks, hasps, fence lines, structures, and vehicles, essentially everything that they use or come into contact with as they move through their workday. With practice this can easily become second nature and part of the daily routine.

In a more structured format, safety inspections should be conducted on at least a monthly basis. Items that fall into this category include fire extinguishers, smoke detectors, carbon monoxide detectors, and first aid kits. The easiest way to approach this is to develop a checklist that the staff in their individual work areas use and follow as a guide every month. This not only provides a method to prevent skipping items, it also allows management to establish a failure-success rate for equipment, develop budgets for items as time goes by, and provide documentation for OSHA and insurance purposes.

A few comments about locks. Padlocks are usually the first line of safety and security in a zoological facility. What type of lock you use can make all of the difference in the world. I can't begin to count over the years how many locks I have seen fail on the third pull while trying to confirm that the lock actually caught and held. There are few things worse than having a lock fall apart in your hands. First rule, purchase quality locks. Second rule, inspect and maintain them with a quality lock cleaner-lubricant.

Vehicles should have a similar checklist for use in the workplace. Once again, I recommend that all vehicles be checked and serviced every month. At one facility I worked at years ago, they used this approach every time you checked out a car or truck, not unlike a rental car company. I'll be the first to admit it was a pain, but you knew what condition it was in when you took possession and if someone else had damaged it prior to you. A great way to stay out of trouble I might add, rather than bringing it back and having someone say, "Hey, how did that happen?"

Question
Our zoo budget doesn't support going to the range on a monthly basis, is there an alternative for firearms training in a zoo environment?

Comments
I recommend a spring-action air gun in .177 caliber. I have had good luck with Beeman, RWS, and Walther products. They're quiet and cheap to shoot. If you want to put a scope on your air gun, remember that you will need a scope specific for this otherwise the reticle will fail. Just find a secluded spot on zoo grounds with a good back stop that will prevent ricochets. I recommend using a sheet of 1/2" plywood on (2) 4 x 4" posts. Just be aware of what's down range before you install it in the ground and you start practicing.

Next Month: Do master plans play a part in facility safety?

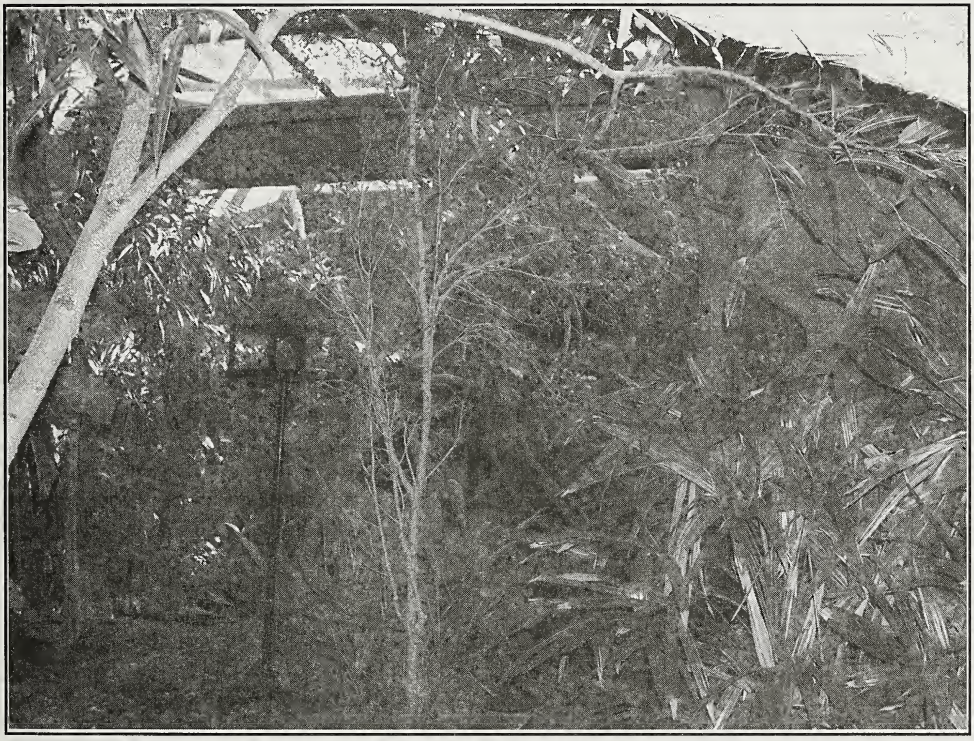
If you would like to submit a question for this column or have comments on previously published materials, please send them to
AAZK, Inc., 3601 S.W. 29th St., Suite 133, Topeka, KS 66614-2054
Attn: Reactions/AKF

(About the Author: Since 1985 Bill has been active in the fields of science, zoology, and wildlife management. His education and experience include a B.S. in wildlife management and post-graduate studies in zoology, Lab and Museum Assistant, Shoot Team Leader, ERT Member, Large Mammal Keeper, Senior Keeper, and Zoo Curator at various zoological facilities. His area of research is crisis management in zoological institutions, which draws upon practical experience and training as a Rescue Diver, Hunter Safety Instructor, NRA Firearms Instructor, and Red Cross CPR/First Aid Instructor. Away from work he operates Panthera Research, which is a research and consulting firm)

Overcoming Training Difficulties in a Mixed Species Exhibit

By Eric Smith, Animal Keeper
Smithsonian National Zoological Park
Washington, DC

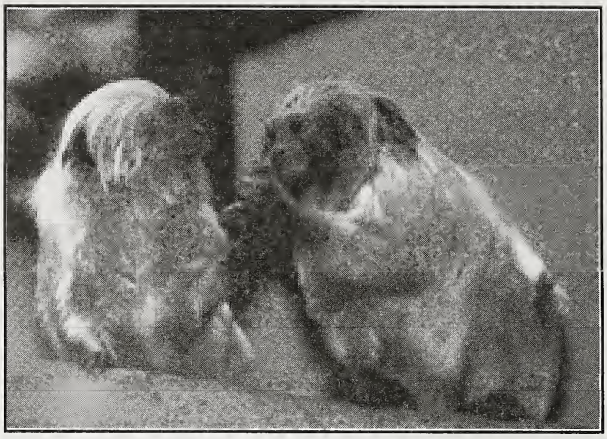
The Smithsonian National Zoological Park's Small Mammal House has a large 9.14m x 6.09m x 4.57m (30' x 20' x 15') mixed species exhibit that houses 1.1 Golden Lion Tamarin *(Leontopithecus rosalia)*; 1.1 Pale-headed Saki Monkey *(Pithecia pithecia)*; 3.3 Green Acouchi *(Myoprocta pratti)*; 0.1 Green Iguana *(Iguana iguana)*; 0.3 Three-banded Armadillo *(Tolypeutes matacus)*; 1.1 Two-toed Sloth *(Choloepus didactylus)*; and 3.0 Silver-beaked Tanager *(Ramphocelens carbo)*. The tamarins and sakis are involved in a training program to aid the keepers in effective husbandry techniques. The trained behaviors include sitting on a scale, targeting, standing to allow palpation and hand presentation for inspection.



Mixed-species Exhibit at the Small Mammal House of the National Zoo in Washington, DC

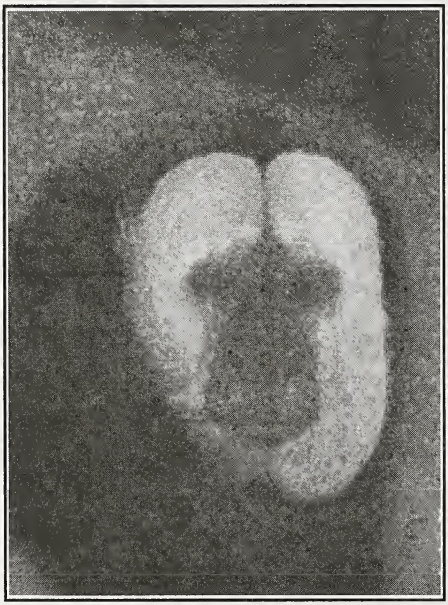
Several months ago the female tamarin (GLT) began losing weight and continued to lose weight over the course of several weeks. Her weight went from 0.560kg to 0.527kg (1.234 lbs to 1.161 lbs). We sent her to our veterinary hospital for observation, along with a male GLT who joined her for companionship. They remained there for two months. Upon their return to the Small Mammal House, they were placed in a different exhibit which measured 2.74m x 2.13m x 1.52m (9' x 7' x 5'.) This new location allowed us to monitor food consumption. Over the next two months their training program was suspended and they became increasingly more skittish of people who came in close contact with them. Once the female's weight increased, they were moved back into the larger mixed-species exhibit where we hoped to re-establish their training regimen.

After the GLTs were reintroduced into the spacious exhibit, the saki monkeys chased them which in turn caused the GLTs to hide on top of a light in a far corner of the exhibit. This area was too small for the sakis to access. Feeding times seemed to prompt the GLT's evasive behavior. Unfortunately, the tamarins remained in that corner for most of the day. Food competition was thought to be the main cause of these actions. So, two additional feeding stations were placed in the exhibit. The problem was not completely resolved but it did seem to curb it slightly. The next step involved getting the GLTs to hand feed again in order to facilitate the female's oral medication treatment. This proved to be more difficult than we thought due to the saki monkey's constant chasing. The female GLT would come down only if the sakis were occupied on the other side of the exhibit. Even then, the female took very tentative steps and would quickly return to the top of the light. Due to staffing and time constraints, it was not feasible to have two people in the exhibit each time we needed to hand feed, medicate or weigh her. We had to find a solution quickly.



Golden lion tamarin pair Eva and Hugo

Chasing was the main problem. How does one stop a negative behavior that is "self-rewarding" for an animal? Start out by thinking of when the behavior was first seen. In this scenario, it was observed mainly during feeding times. Next, begin to think of ways to curb or stop the behavior. Adding additional food pans seemed to be the most obvious answer. Unfortunately, that did not work. The sakis chased the GLTs away from all of the food pans which resulted in the sakis getting more food for themselves. Subsequently, we contacted our colleagues for input and finally ended up being creative. We utilized their lofty, safe zone and sat in an adjacent concrete tree that supported our weight. We climbed the tree, sat and hand fed the GLTs. This location allowed us to simultaneously hand feed the sakis on a nearby branch. The tamarins felt secure because they were out of reach of the sakis and the sakis were satisfied that they would still get plenty of food even if the GLTs ate at the same time. We spent two weeks, several times a day, climbing into the tree to hand feed everyone side by side until the GLTs began venturing into the exhibit again and the sakis stopped chasing them. Then it took another three weeks to regain the trust of the tamarins to the point where they would do the simplest behaviors from their previous training program.



Oberon, one of the Pale-faced saki monkeys in the mixed-species exhibit at National Zoological Park.

Due to our creative and unique approach to the problem, we did not have to move the animals out of the exhibit and we were able to dramatically curb a negative behavior. Also, we were able to restart their training program so that we could better manage the animals in a less stressful environment.

(All photos by Eric Smith)

Zookeeper Internships at the Cheetah Conservation Fund

By Judith Walls, Volunteer Coordinator
Cheetah Conservation Fund
www.cheetah.org

Background - The Cheetah Conservation Fund (CCF) was founded in 1990 by its Executive Director, Dr. Laurie Marker. Our mission is "to be an international organization recognized as the center of excellence in research and education on cheetah and their ecosystems, which works with all stakeholders to achieve best practice in the conservation and management of the world's cheetah". CCF has a three-pronged approach to saving the wild cheetah that includes conservation, research and outreach. Our conservation programs covers elements such as livestock management techniques and breeding guardian dogs, habitat conservation and the development of conservancies within Namibia. We conduct research on cheetah health and reproduction, cheetah behavior and ecosystem research. Our outreach programs are targeted at Namibian and international schools, farmers, and the general public. We also focus on training farm workers and future farmers of Namibia.

Zookeepers as Volunteers - As of the end of 2005, CCF Namibia has 38 resident cheetahs that cannot be released to the wild due to orphanage, injury or old age. These cheetahs need daily care, which is why CCF is keen to have experienced zookeepers intern with CCF. By being at CCF, zookeepers can learn much about our conservation program, including outreach, education and research, and specific issues facing the wild cheetah in Namibia.

Zookeepers who intern at CCF have the main responsibility of caring for our resident cheetahs. Daily work includes preparation of meals, feeding, animal care, general husbandry such as cleaning enclosures, checking the animals' conditions, maintaining fences and enclosures, caring for sick animals and updating the cheetah log/notes. Other tasks zookeepers may expect include assistance in soft-release of resident cheetah, tracking cheetah by radio collar, general farm work and training. In addition, keepers will be involved in our guardian dog program.

To qualify for a zookeeper internship, you must be a full-time, experienced zookeeper. You must have at least one year of experience, but preferably longer, and be at least 18 years old. You must let us know of any specific requirements for the internship set by your facility/ university. We will attempt to match your internship program requirements, if possible. Keepers typically volunteer between one to three months at CCF.

What to Expect - CCF Namibia is the headquarter of the Cheetah Conservation Fund. CCF Namibia is located on Eland's Joy, a farm about 30 miles (44km) east of the town Otjiwarongo, and about 3.5 hours drive from Namibia's capital, Windhoek. Eland's Joy has been developed over a number of years into a sophisticated Research & Education Centre, housing three large buildings: a cheetah museum, a research and veterinary clinic – which is also the office – and an education hall. Staff housing, volunteer rondavels and student dorms are nearby, with showers/bathrooms located within walking distance. Also nearby is a communal kitchen and dining hall, and a TV/common room. Some staff and volunteers remain in Boskop, one of CCF's farms about 5 miles (8km) from the main center.

CCF Namibia is a collection of working farms as well as housing rescued, orphaned, and on occasion, wild cheetahs. Our farms have sheep, goats and cattle. Annually, we bale hay, fix fences, cut down overgrown bush, feed and care for animals. We breed and actively maintain Anatolian Shepherd guardian dogs. We care for many cheetahs that cannot be re-released due to injury or orphanage. We conduct research, education and training programs. And on a daily basis, we allow day-visitors to visit our museum, observe our cheetahs and learn about our programs. In short, it's a very busy place, with many people and animals.

Mandatory Donation - Our volunteer program is fee-based: because we are a not-for-profit organization relying entirely on donations, all volunteers and student interns and zookeepers are required to make a mandatory donation to CCF to cover the cost of room, board, training and supervision of volunteers. This fee also contributes to the day-to-day costs of running CCF Namibia. It is because of generous donations that we are able to continue to operate our education, outreach and research programs.

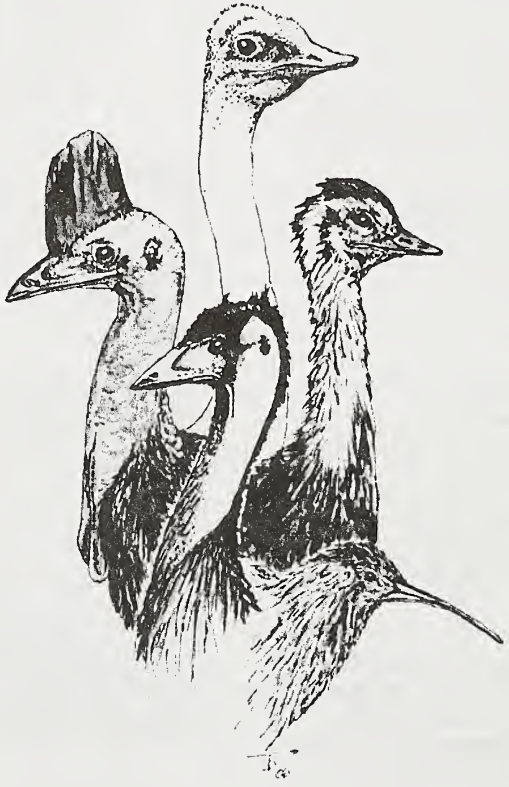
We offer a special fee for internships at CCF. The fee for zookeeper internship is US$1500 per month. The fee does not include transportation from Windhoek airport to CCF for which you should budget an additional US$175 (one-way). The fee also excludes the costs of your flights, spending money and personal expenses.

Application Process - To apply to volunteer at CCF, please email our Volunteer Coordinator, Judith Walls on ccfinfo@iway.na. For more information on the Cheetah Conservation Fund and its volunteer programs, visit our website at www.cheetah.org.

Ratite TAG Opens Listserve, Premiers New Logo

The Ratite Taxon Advisory Group (TAG) is now active and has a listserve. To subscribe to the listserve, send an email to TAG Chair, Sara Hallager at hallagers@si.edu.

The TAG also has a logo. Illustrated by Senior Keeper, Debi Talbott, National Zoo, the logo depicts the species managed by the TAG.



Software to Manage Incubation Now Available

Brinsea has released eggWISE, software developed specifically to help manage egg incubation. The software covers all the data needs of incubation from single egg weight loss analysis to records of breeding birds and their offspring.

"As successful bird breeders know, the key to good hatch rates is repeatability of correct incubation conditions," said Ian Pearce, Managing Director of Brinsea. "We have developed eggWISE to help breeders optimise their incubation conditions simply and easily."

Features include:

- Graphical egg weight loss analysis (either singly or by batch) to ensure the correct incubation humidity is used.
- Fresh egg weight calculation. Allows the breeder to determine how far through incubation an egg is.
- Full taxonomy database - alphabetical species list with incubation times.
- Recording of breeding bird details and tracking of offspring.
- Management of multiple incubators: which eggs are in which machine and records the individual incubator environmental settings used.
- Automatic notification when an egg is due to be transferred to a hatcher or is due to hatch.
- Daily 'to do' list

Brinsea's new eggWISE incubation software is available to download for a free 30-day trial from the Brinsea website (www.brinsea.co.uk). After the trial an activation code, costing £25.85 (approximately $46 US) including VAT, converts the trial software to full use. A CD version, including the eggWISE software and a free copy of Brinsea's Incubation Handbook (as a .pdf document) is also available for the same price. Images available at http://www.brinsea.co.uk/uk/news/eggwise.html

For more information, contact:
Dick Selwood, New Technology Communications, dick@ntcom.co.uk
or Ian Pierce, Brinsea, ian@brinsea.co.uk

Hand-Rearing a Baird's Tapir

(Tapirus bairdii)

By
Melody S. Cooke, Animal Health Keeper
Jacksonville Zoo and Gardens, Jacksonville, FL

"Hand-rearing may be essential for the survival of an endangered species because the genetic contribution of a few individuals to the gene pool of such a species may be critical to the survival of the population." (Bruce W. Read and Jane E. Meier)

Before deciding to hand rear a neonate, many factors should be considered. Factors which may result in removing the neonate from the parent/parents include: aggression, inexperience, heredity, medical concerns or the environment.

The Jacksonville Zoo and Gardens received 1.1 Baird's tapir on 22 October 1997 from the Columbus Zoo. Their medical history revealed that the pair had copulated and the 0.1 had given birth five times. Two out of five neonates died days after delivery. The Columbus Zoo hand-raised 2.0. The neonates were originally pulled from the dam and sire due to parental aggression. Medical records indicated that the three all died from similar complications believed to be related to Neonatal Isoerythrolysis. Neonatal Isoerythrolysis is described in these tapirs births in detail in the Journal of Zoo and Wildlife Medicine (Volume 28 Number 3 Sept. 1997 pg.285) written by Ray F Wack D.V.M., M.S. and Althea A Jones, D.V.M. As defined Neonatal Isoerythrolysis (NI)-is a hemolytic disease. It is an immune-mediated hemolytic anemia resulting from destruction of the neonatal red blood cells (RBCs) by maternal antibodies as a result of red cell antigenic determinants inherited by the neonate from the sire that are lacking in the dam. After the dam is exposed to fetal red blood cells, at or just before parturition, antibodies against the fetal RBCs are produced that are concentrated in the colostrum, ingested by the neonate, and absorbed. These absorbed anti-RBC antibodies usually result in neonate RBC destruction. Offspring with an antigen to which the dam is sensitized may develop life-threatening anemia within hours of ingestion of colostrum, thus hand rearing to prevent this ingestion is critical to the offspring survival.

This paper describes the hand rearing of 1.0 Baird's tapir born at the Jacksonville Zoo and Gardens after the transfer of the pair from the Columbus Zoo for breeding.

Initiation of Breeding:
The Species Survival Plan® and the tapir studbook coordinator recommended that this pair of tapirs be bred. Under that advisement, the pair was reintroduced. At the Jacksonville Zoo and Gardens the mammal staff observed breeding almost immediately. An ultrasound exam confirmed that copulation was successful. With gestation at 18 months, the due date was estimated to be as early as August and as late as October 2000. Being aware of the 1.1 tapirs' medical and behavior background pertaining to the mortality rate of their offspring, the mammal curator and veterinarian felt that hand-rearing would be the only option to ensure the health of the neonate.

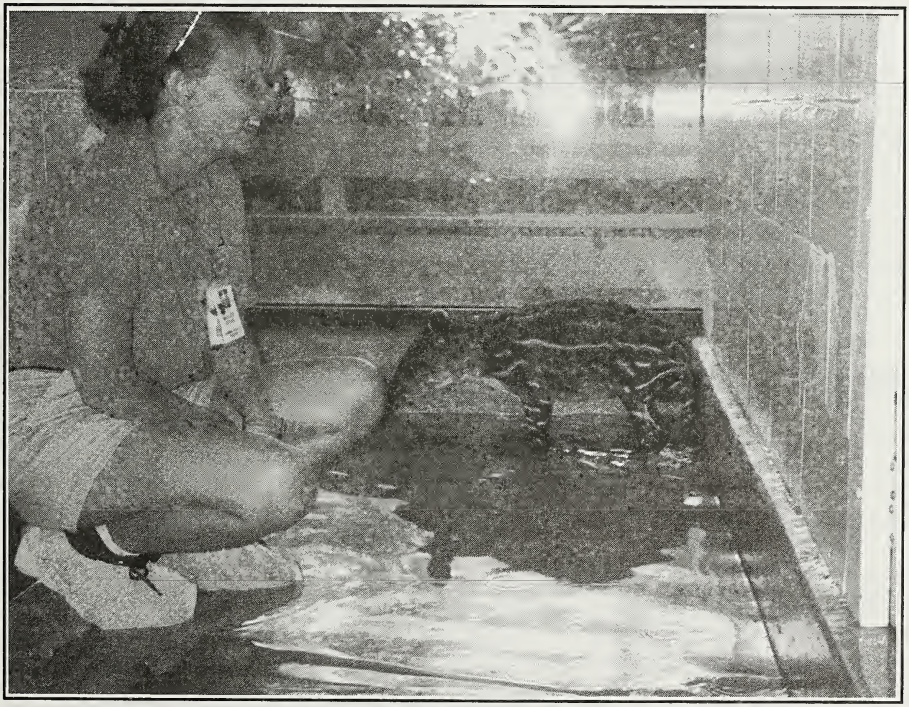
Getting prepared for the neonate:
First the adult 0.1 was relocated from her exhibit to the hospital hoof stock stalls . This would ensure easier and quicker access to her in order to remove the neonate immediately after birth. Prevention of neonate nursing is critical to its survival. Cameras were placed in all stalls to which she had access. She was placed on an hourly watch around the clock. Security staff took care of night watch. A protocol in the event that she gave birth during the night was written for them. When she came closer to term, a half hour watch was implemented. During this time the hospital keeper

staff began gathering information from other institutions that had raised tapirs. The Columbus Zoo was contacted as well as the San Diego Zoo. With the information obtained, and with the expert nutritional knowledge from our vets, a hand-rearing feeding schedule and formula was derived. Supplies that were obtained were Foal Lac 20/14 and Bovine Colostrx. Lamb nipples and bottles were purchased. A pig blanket was brought to the hospital and a stall was set up for the neonate.

A 1.0 Baird's tapir was born on 17 March of 2000 and named "Tonka". The nursery staff's standard neonate protocol was implemented. Neonate was to be weighed and temperature taken daily. Normal body temperature should range between 98.8°F-100°F (37.1°F-37.7°C). This was derived from other institutions that hand raised tapirs.

The Baird's Tapir feeding schedule for the first week is as follows:
Day 1-Bovine Colostrx® 100%, 150ml was offered every 3 hrs-24 hour period.
Day 2-Bovine Colostrx® and Foal Lac® 20/14 blend, 50% Colostrx® to 50% Foal Lac® every 3 hrs 24- hour period.
Offered 20% of body weight for the total daily intake
Day 3-same as day 2
Day 4-Bovine Colostrx® / Foal Lac® 20/14, 10% Colostrx® to 90% Foal Lac® every 3 hrs starting at 7-am-11-pm.
Day 5-Bovine Colostrx® / Foal Lac® 20/14, blend, 10% Colostrx® to 90% Foal Lac® every 3 hrs, 7-am-10-pm.
Day 6-Bovine Colostrx® / Foal Lac® 20/14, 10% Colostrx® to 90 % Foal Lac® every 3 hrs, 7-am-8-pm.
Day 7-Bovine Colostrx® / Foal Lac® 20/14, blend, 10% Colostrx® to 90% Foal Lac® every 3 hrs, 7:30-am-4: 30-pm

SEE CHART FOR CONTINUATION OF SCHEDULE.



Baird's tapir "Tonka" shown with the author, was taken to aquatic stall in the zoo nursery to encourage defecation. *(Photo by Lisa Gates)*

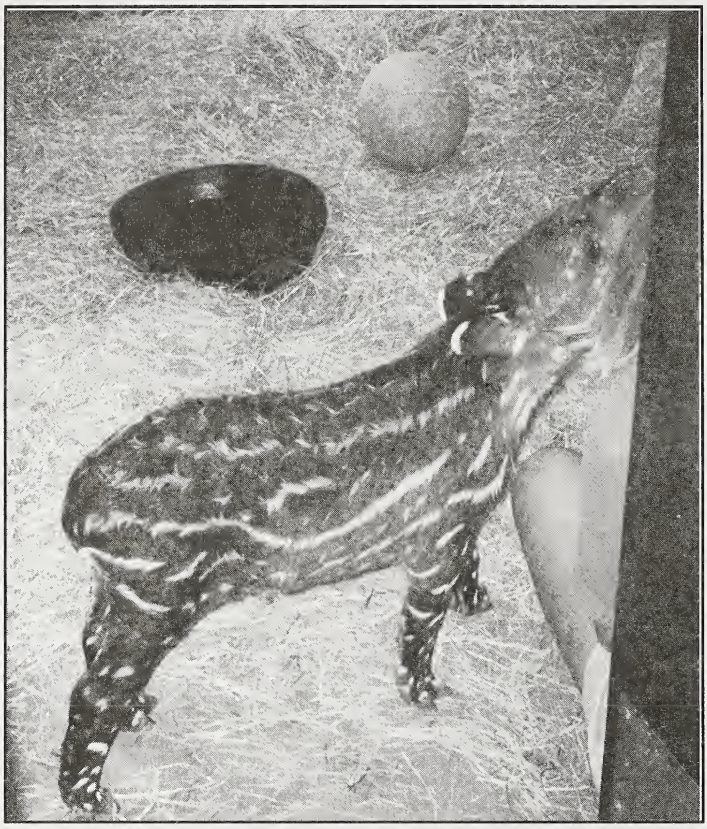
Tapir Feeding Chart

AGE (WEEKS)	FORMULA	AVERAGE AMOUNT CONSUMED	SOLIDS	Number of Feedings per day
2nd	10% Bovine Colostrx to 90%Foal-Lac	480ml per feeding 1920ml per day	Not offered	4 @ 3hr intervals
3rd	10% Bovine Colostrx to 90% Foal-Lac	475 ml per feeding 1900ml per day	Not offered	4 @ 3hr intervals
4th	10% Bovine Colostrx to 90% Foal-Lac	705 ml per feeding 2800ml per day	Not offered	4 @ 3hr intervals
5th	10% Bovine Colostrx to 90% Foal-Lac mix with 1cup of yogurt and 1 tab of Lactaid per feeding	670 ml per feeding 2680ml per day	Not offered	4 @ 3hr intervals
6th	10% Bovine Colostrx to 90% Foal-Lac mix with 1 cup of yogurt and 1 tab of Lactaid per feeding	700 ml per feeding 2800 ml per day shown no interest in adult diet	*Adult Diet with sweet feed and Athlete added. Browse and alfalfa offered	4 @ 3hr intervals
7th	10% Bovine Colostrx to 90% Foal-Lac mix with 1 cup of yogurt and 1 tab of Lactaid per feeding	705 ml per feeding 2800 ml per day Started eating browse, sweet feed and apples	Adult diet with sweet feed and Athlete added. Browse offered	4 @ 3hr interval
8th	10% Bovine Colostrx to 90% Foal-Lac mix with 1 cup of yogurt and 1 tab of Lactaid per feeding	750 ml per feeding 3000 ml per day eating most of adult diet some alfalfa	Adult diet with sweet feed and Athlete added. Alfalfa and Watermelon given as a treat	4 @ 3hr intervals
9-10th	10% Bovine Colostrx to 90% Foal-Lac mix with 1 cup and yogurt 1 tab of Lactaid per feeding	625 ml per feeding 1875 per day eating most of adult diet and browse	Adult diet with sweet feed and Athlete added. Alfalfa and browse offered	3 @ 4hr intervals
11-12th	100% Foal-Lac mix w 1 cup of yogurt and 1 tab of Lactaid per feeding	350 ml per feeding 1125 ml per day eating most of adult AM/PM diet eating alfalfa, coastal bermuda grass hay and browse	Adult diet 2x daily with sweet feed and Athlete added. Alfalfa, coastal	2 @ 8hr interval

Tapir Feeding Chart *(cont'd)*

			Browse added	
AGE (WEEKS)	FORMULA	AVERAGE AMOUNT CONSUMED	SOLIDS	NUMBER of Feedings per day
13-14th	100% Foal-Lac mix with 1 cup of yogurt and 1 tab of Lactaid per feeding	750 ml at feeding 750 ml per day eating all AM/PM diet eating alfalfa, coastal bermuda grass hay and browse	Adult diet 2x daily with sweet feed and Athlete added. Alfalfa, coastal bermuda grass hay and browse offered	1 @ 8:30am
15th		Eating all AM/PM diet Eating alfalfa, coastal bermuda grass hay and browse	Adult diet 2x daily with sweet feed and Athlete added. Alfalfa, coastal	
			bermuda grass hay and browse offered	
		•Adult Diet: 1 1/2 apples cut in quarters 1 1/2 carrot cut in quarters 2 chunks sweet potato cut in quarters 1/2 unpeeled banana 1/4 head romaine		
		1/4 head endive 1 1/2 gal ADF Mazuri brand		
		*5628 Mazuri ADF 16 Regional *Purina Athlete 3563		
Products used:	Publix Brand & Winn-Dixie	Non-flavored 1cp yogurt		
	Mazuri-Purina-Mills, L.L.L.	***5628 ADF 16 Regional Athlete 3563***		
	Schering-Plough Animal Health Corp.	***Bovine Colostrx***		
	Pet-ag-	***Foal-Lac 20/14 powder***		
	Lactaid enzyme supplement McNeil-PPC, Inc.	*Lactaid Ultra* *5mg Sodium* *Lactaid Enzyme 9000 FCC Units*		

In conclusion: The neonate's weight increased approximately 10% every three days. Body temperature ranged from 97.8°-101°F (36.5-38.3°C). Ambient temperature was in the upper 70's. Neonate did not defecate the first week. This seems to be common with hand reared tapirs. In the beginning of hand-rearing the tapir would only defecate in standing water. Neonate was completely weaned off formula and eating an adult tapir diet at 14 weeks of age.



Some medical conditions that developed during rearing included anemia, pneumonia and gastro-intestinal ulcers which produced blood in his stool and vomiting. All medical issues were resolved through an extensive pharmaceutical regimen and some diet additions. Yogurt and Lactaid® tablets were added (see Feeding Chart for additions). Hand-rearing was successful. On 19 June 2003 "Tonka" was transferred to another institution, the Bergen County Zoological Park in Paramus, NJ.

Baird's tapir "Tonka" was kept in a dry stall during the day.
(Photo by Lisa Gates)

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Wack, Ray F., D.V.M., M.S., and Jones, Althea A., D.V.M. Journal of Zoo Medicine –Volume. 28, Number 3 September 1997 pg. 285 *Suspected Neonatal Isoerythrolysis In Two Baird's Tapir*

Legislative/Conservation Update

Compiled by Georgann Johnston
Legislative Advisor
Sacramento, CA

Drought Puts Kenya's Wildlife at Risk

Wildlife officials fear that a severe drought which has left millions of people hungry across East Africa is now threatening Kenya's famous animals, which are straying out of protected areas in search of water. The Kenya Wildlife Service (KWS) says as watering holes and rivers run dry, elephants are straying out of national parks close to human settlements, risking conflict with villagers.

"Already elephants are migrating out of the parks to the periphery near villages to hunt for water," KWS spokeswoman Connie Maina said. "Our biggest concern is that there will be more human and wildlife conflict as more elephants go into these areas and come into contact with unsuspecting residents," she added.

The lack of rains in many parts of East Africa — including Kenya, Somalia and Ethiopia — has left around six million people on the brink of starvation, according to the United Nations. While northeastern Kenya is the worst affected by the drought, with several deaths reported due to malnutrition related illnesses and the loss of thousands of livestock, officials say national parks and reserves are also being hit. With 59 sanctuaries, reserves and national parks, Kenya's wildlife is the top attraction for the hundreds of thousands of tourists who flock there every year for safari holidays.

Maina said the worst affected parks were Tsavo National Park in the southeast and the popular Masai Mara National Reserve in the southwest, where herds of elephants have been invading neighboring areas since December, when expected rains failed. She said at least two people have been killed in recent weeks when elephants stampeded areas around Tsavo.

In the Masai Mara, wardens say that between 60 and 80 hippos have died as water levels in the Mara river drop, while territorial, protective males who guard over their pods fight over space as new bulls move in. They say bloated carcasses of hippos have been found floating in the river and other hippos have wounds from fighting.

Wildlife experts say while the lack of water is the main problem affecting the animals, food, which is currently adequate, could also pose a challenge as herders bring their cattle into the national parks to graze. The KWS has stepped up patrols in the protected areas to try to stop cattle moving in and depleting the remaining grazing pastures and vegetation. The patrols are also used to alert neighboring villagers to be vigilant against straying animals.

Park rangers say they are also concerned about zebra populations — considered highly vulnerable to drought conditions — and are currently monitoring if any have been affected as a direct consequence of the drought.

"If the rains expected in March do not come we could have a serious problem," Maina said. *Source: By Nita Bhalla forReutersAlertnet.org 1/18/06*

Kenya May Bring Back Hunting

Kenya may lift a three-decade ban on sport hunting as part of a broader revamp of its wildlife policies, a senior wildlife official reports. Such a move could see foreign hunters target Kenyan lion, buffalo and antelope species, but would provoke resistance from animal welfare groups.

Julius Kipng'etich, Director of Kenya Wildlife Service, said: "We started a policy review in September last year on our entire wildlife policy, looking at a range of issues. The ban on hunting is one of those up for review and discussion. Hunting is one way of utilizing wildlife, but there are others.

"Much of our wildlife is outside of protected areas and local communities must get benefits from wildlife," he added. Other options include game viewing and bird watching in protected reserves, the main route Kenya has been taking.

Kenya has long been an icon for animal welfare groups because of its ban on the hunting of animals for sport, imposed in 1977. But other African nations - including neighbouring Tanzania - have cashed in on the lucrative big game hunting industry.

Laurence Frank, a researcher with the Bronx Zoo-based Wildlife Conservation Society, said: "Hunting is the most lucrative way of utilizing wildlife and it has the least impact." He said this is because foreign sport hunters tend to favor "trophies", which are usually older, non-breeding animals. He added that with hunting there are fewer people and vehicles than when tourists visit game reserves, so it can be less intrusive. *Source: News.scotsman.com 1/14/06*

Myanmar Faced with Tiger Extinction Threat

Myanmar's wildlife department plans to step up the fight against poaching of tigers, alarmed by the decline in the big cat population to about 150 from over 3,000 in 1980. Myanmar was estimated to have over 3,000 Bengal and Indo-China tigers in 1980, the second in Asia after India.

However, according to the latest figures by the forestry department, only about 150 tigers remain in the Hukuang Tiger Reserve, claimed to be the world's largest. The tiger data collection of the forestry department was jointly carried out with the co-operation of the New York-based Wildlife Conservation Society (WCS) since 1998 with the use of a camera trap as well as modern scientific methods.

The Hukuang Tiger Reserve, located in northern Kachin state, was established in 2004 and covers about 22,000 sq km. Some 25,000 people also live in the reserve. *Source: The Times of India 1/11/06*

BirdLife Botswana Probes Bustard Poaching

BirdLife Botswana has undertaken an investigation of Kori Bustard (*Ardeotis kori*) poaching and found the practice to be widespread, both for local consumption and for export to South Africa and beyond. The study focused on 16 settlements bordering the Kgalagadi Transfrontier Park (KTP) and Khutse Game Reserve (KGR)—both strongholds for Kori Bustard in Botswana.

The Kori Bustard is the world's largest bustard and occurs across sub-Saharan Africa. Although still common in some protected areas, it is currently experiencing rapid population declines across much of its range. The Botswana populations are threatened by habitat loss due to overgrazing and poaching.

"We found that many Kori Bustards are poached for local consumption, mainly by men over 30," says BirdLife Botswana's Kabelo Senyatso. "Snares are mostly used to kill birds in KGR, whilst guns are favoured in KTP. In some areas only tribal elders are allowed to eat bustard meat. Sometimes a traditional doctor is brought in to 'treat' it before it is eaten, because of a belief that bustard meat can otherwise cause mental illness."

"We also found evidence of illegal cross-border trafficking in live bustards. Up to ten at a time are smuggled into South Africa where they are sold as a delicacy to wealthy individuals or exported outside Africa." —*Kabelo Senyatso, BirdLife Botswana*

However, on a positive note, the study found no evidence of trade in Kori Bustard body parts within Botswana, unlike other range states.

The study was funded by the Disney Wildlife Conservation Fund and the Global Environment Facility/ Small Grants Programme (Botswana office). To receive a copy of the final report, learn more about the project and offer assistance with follow-up work, please email: blb@birdlifebotswana.org.bw
Source: This story appears in the December 2005 issue of BirdLife's World Birdwatch magazine.

Rocky Mountain Population of Gray Wolves Proposed for Delisting

The U.S. Fish and Wildlife Service issued an advanced notice of proposed rulemaking that outlines the agency's intent to remove gray wolves (*Canis lupus*) in the northern Rocky Mountains from the federal list of threatened and endangered species. The advance notice of proposed rulemaking is being issued in order to give the public time to review and comment on the Service's proposed

strategy of designating and proposing to delist a distinct population segment (DPS) of wolves in the northern Rocky Mountains that have exceeded biological recovery goals and no longer require protection under the Endangered Species Act. As part of a future rulemaking, the Service intends to propose establishing a gray wolf DPS, encompassing the geographic boundary of all of Montana, Idaho and Wyoming, the eastern third of Washington and Oregon, and a small part of north-central Utah.

If this advanced notice of proposed rulemaking were implemented, wolves outside the boundaries of the DPS in other parts of the country would continue to be listed as endangered, except for the Mexican gray wolf in Arizona, Texas, and New Mexico, which is listed as an experimental, non-essential population. The Service anticipates publishing a proposal to establish and delist a Great Lakes DPS of gray wolves, which has also exceeded its recovery goals, in the near future.

"Gray wolves in the Northern Rockies have exceeded their recovery goals and are biologically ready to be delisted," said Dale Hall, Director of the USFWS. "However, the potential delisting cannot be finalized until Wyoming's wolf management plan has been approved. We are hopeful that Wyoming will be able to develop a state law and management plan which meets the Service's criteria for approval."

The USFWS claims that the minimum recovery goal for wolves in the northern Rocky Mountains of 30 breeding pairs and at least 300 wolves for three consecutive years was attained in 2002. The most recent official population counts in 2004 found that Montana had 15 breeding pairs and approximately 153 wolves; Wyoming had 24 breeding pairs and approximately 260 wolves; and Idaho had 27 breeding pairs and 422 wolves. Official population estimates for 2005 are not yet available but are expected to be slightly higher than last year.

If the northern Rocky Mountain DPS is delisted in future rules, the individual states and Tribes will resume sole management of wolves within their respective boundaries. Montana and Idaho have adopted state laws and wolf management plans, approved by the Service, to conserve their share of a recovered northern Rocky Mountain wolf population into the foreseeable future. Wyoming's law and its wolf management plan have not been approved by the Service. *Source: USFWS Press Release 2 February 2006*

Protection for Puget Sound Orcas Acquired

The Center for Biological Diversity won a conservation victory in November 2005 when the National Marine Fisheries Service announced that Puget Sound's Southern Resident killer whales (*Orcinus orca*) will be protected as an endangered species under the ESA. The Southern Residents are believed to be at risk of extinction primarily because of toxic pollution, reduced abundance of wild salmon (the whale's primary prey) and disturbance and noise from vessel traffic. The ESA protection addresses all of these threats by requiring polluters to ensure toxins will not travel up the food chain and deposit in highly concentrated amounts in whale blubber; by protecting the whales' critical feeding habitats from destruction and thereby ensuring salmon populations remain healthy; and by authorizing substantial criminal and civil penalties against vessels that harm and harass killer whales.

In 2001, after a 10-year study, the Center for Biological Diversity published a scientific study of the Southern Residents' status. This study found that without provisions to protect them, these killer whales would go extinct within 100 years. The Center then drafted and submitted a petition to protect the Southern Residents under the ESA. In response, the Bush administration announced in 2002 that it would not protect the whales under the ESA, claiming that Puget Sound's whales are not "significant" enough to warrant protection. In response, the Center filed suit and a court ultimately determined that the administration's decision denying protection to the Southern Residents was "arbitrary and capricious" under the law and should be reversed. The National Marine Fisheries Service then took action to protect the Southern Residents as an "endangered" species in a rule-making procedure. The agency agreed with conservationists that "designating critical habitat is useful for the recovery of Southern Resident killer whales" and is expected to propose protected habitat for the whales in the near future. *Source: Endangered Earth, published by the Center for Biological Diversity Winter 2005-2006*

Study Finds Global Warming Is Killing Frogs

For more than a decade, researchers have been puzzled by the mysterious disappearance of harlequin frogs (*Atelopus varius*) from the tropical forests of Costa Rica. Now, a group of scientists believe

they have pinpointed the likely cause: global warming that promotes a fungus that is fatal to the frogs. The finding is likely to fire up the debate about whether climate change is affecting the dynamics of disease, and why amphibians are dying out in such massive numbers world-wide.

In Costa Rica, researchers found that the region's brightly-colored harlequin frogs were succumbing to a disease caused by the chytrid fungus, which has also been implicated in a wave of amphibian deaths elsewhere in the world. Using records of sea and air temperatures, the scientists discovered that the frogs were disappearing at a rate in near-lockstep with the changing climate. About 80% of the disappearance of frogs corresponds to unusually warm years when the fungus thrives. The fungus grows on amphibians' skin, creating a dermatological condition for the creatures that is often fatal. About two-thirds of the harlequin species, which once thrived in the tropics of Central and South America, vanished in the 1980s and 1990s.

The scientists researching the decline in the Costa Rican harlequin species studied air and sea surface temperatures from 1973 to 2000 and found that rising temperatures enhanced cloud cover over tropical mountains, leading to warmer nights and cooler days. The change appears to have favored the chytrid fungus, which grows and reproduces best at temperatures from 66-77°F (18-25°C). One solution for the harlequin frogs might be to move their populations to altitudes where the fungus does not thrive as well. However, the team leader for the research project stated that while climate changes may be helping the fungus to spread, the source of the fungus is still unknown or whether it can survive without the amphibians. *Source: Wall St. Journal 11 January 2006*

USFWS Finds Listing of Polar Bears as Threatened May be Warranted

The USFWS announced in February 2006 that a petition to list the polar bear (*Ursus maritimus*) as threatened under the Endangered Species Act presents substantial scientific and commercial information indicating that listing the polar bear may be warranted. As a result, the agency is initiating a status review of the polar bear to determine if the species should be proposed for listing. The Service is soliciting scientific and commercial information regarding this species, including information on: population density; habitat selection; short-term effects of climate change and sea ice change; effects of other potential threats to the species including oil and gas development, hunting, and poaching; and information concerning whether any populations of the species may qualify as distinct population segments.

At the conclusion of the 12-month status review, a finding will be published announcing the Service's determination. If the listing is believed to be warranted, the Service will publish a proposed rule to list the species, unless the action is precluded by the need to undertake higher priority actions on other species.

Over a year ago the Service was petitioned to list the polar bear as threatened and to designate critical habitat. The petition contained detailed information on the natural history and biology of the polar bear and on the current status and distribution of and perceived threats to the species. The petitioner submitted additional information in a letter received in December 2005, to be considered along with the information in the initial petition. The new information was included in the original petition and considered as a new petition, thus restarting the statutory deadline for making a 12-month finding. *Source: USFWS Press Release 8 February 2006*

Federal & State Spending on Endangered Species Reported by USFWS

The USFWS released a report on 24 January 2006 on Federal and State government spending associated with implementation of the Endangered Species Act (ESA) in fiscal year 2004. The report provides a species-by-species account of expenditures made for the conservation of endangered and threatened species. The Service and 30 other federal agencies reported expenditures this fiscal year and all 50 States were involved in the reporting process. Total expenditures reported for 2004 were $1.4 billion, of which $793 million was reported as expenditures for specific individual species and $60 million was reported for land acquisition.

Also included in the total was $559 million reported as "Other ESA Expenses," a category added to the report in fiscal year 2001 to better quantify the costs related to implementing the ESA that could not be allocated to individual species. This category includes those costs for activities such as law enforcement, recovery coordination, consultation and activities benefitting multiple species. Expenditures by all agencies for most staff salaries, operations, maintenance and other support services are also included under this category.

Because of improvements in reporting methods, the report cannot easily be compared to previous expenditures reports. The variability in costs is due to the following: Changes in how each agency and State calculates their expenditures; changes in the number of agencies reporting; changes in the number of listed species; changes in the agencies' abilities to track expenditures.

For more information, you can find the Endangered Species Expenditures Report for fiscal year 2004 at http://www.fws.gov/endangered/pubs/expenditurereports.html>. *Source: USFWS Press Release 24 January 2006*

Protection of Endangered Species on U.S. Military Installations Subject of Agreement

Representatives of the Department of Defense, the USFWS and the International Association of Fish and Wildlife Agencies signed a Memorandum of Understanding in January 2006 that will help manage natural resources on military installations, under provisions of the Sikes Act. The Sikes Act was enacted in 1960 to promote sustained multipurpose use of natural resources on lands controlled by the Department of Defense, and requires development and implementation of an Integrated Natural Resource Management Plan (INRMP) for each installation with "significant natural resources." The development and planning of INRMPs is accomplished in coordination with the Service and appropriate State fish and wildlife agencies.

The management plans consider a variety of natural resource uses and encourage public access to military reservations for hunting, fishing and birding, when appropriate. The signatories developed the document, which encourages additional coordination and discusses cooperative elements of the Sikes Act, as well as calling for establishment of INRMP implementation teams. The MOU further describes the roles, responsibilities and operating authorities of the parties to the agreement; includes a provision that formalizes the Sikes Act core Group, which consists of representatives from the three agencies who will meet at least quarterly and contains provisions that encourage the development of Sikes Act partnership teams and cooperative funding agreements.

Military installations often include relatively large areas of wildlife habitat, wetlands and vital ecosystems that host marine mammals, rare flora, more than 320 threatened and endangered species and diverse archaeological and historical sites and historic buildings, and the Sikes Act helps preserve all of those assets. *Source: USFWS Press Release 31 January 2006*

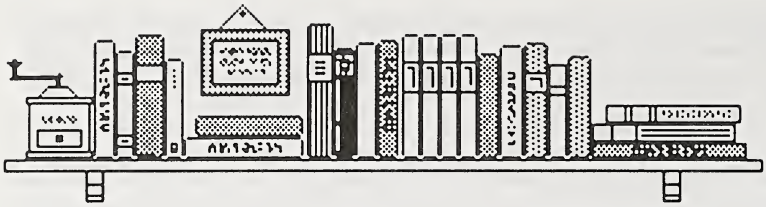
Study Reveals Male Monkeys Prefer Toy Cars, Females Like Dolls

Scientists studying the behavioral differences between the sexes have found that seemingly "human" traits also seem to hold true for other primates. These differences apparently date far back in evolutionary history to the time before humans and monkeys separated from their common ancestor some 25 million years ago, according to Gerianne Alexander, a psychologist at Texas A&M University in College Station, TX who led the experiment.

In the monkey experiment, researchers put a variety of toys in front of 44 male and 44 female vervet monkeys (*Cercopithecus aethiops*), and measured the amount of time they spent with each object. Like little boys, some male monkeys moved a toy car along the ground. Like little girls, female monkeys closely inspected a dolls' bottom. Males also played with balls while females preferred cooking pots. Both were equally interested in neutral objects such as picture books and a stuffed dog.

Alexander speculated that females of both primate species prefer dolls because evolution programmed them to care for infants. Males may have evolved toy preferences that involve throwing and moving, skills useful for hunting and finding a mate. People used to think that boys and girls played differently because of the way they were brought up. Now scientists such as Alexander say a creature's genetic inheritence also plays an important role. Alexander reported her results in the journal *Evolution and Human Behavior.*

Source: Arizona Daily Star, Knight Ridder Newspapers 12/25/05



Book Reviews

Longevity of Mammals in Captivity from the Living Collections of the World
By Richard Weigl, 2005
E. Schweizerbart'sche Verlagsbuchhandlung, Johannesstrasse 3A, 70176 Stuttgart, Germany
200+ pgs. Price: $41.50

Review by K. Benirschke
San Diego, CA

When it comes to finding out how long an animal might live in a zoo, we automatically refer to Marvin Jones' compilation of data (Jones: Longevity of captive mammals. Zool. Garten 52:113-128, 1982; Longevity of ungulates in captivity, International Zoo Yearbook. 32:159-169, 1993). Now, however, there is a recently published book of which you need to be aware. That book is entitled: *Longevity of Mammals in Captivity from the Living Collections of the World*, and was compiled by Richard Weigl.

The author is an accomplished animal keeper at the Frantfort Zoo and has collected information on animals for more than 25 years, and has also traveled extensively through numerous zoos. He has thus compiled in 200+ well-organized pages a massive amount of information that will be of interest to all zoo people. Numerous references are added and all the information has been checked by Marvin Jones, as is fully acknowqledged by the author. Much of the information has been gathered from ISIS, but the author is careful in assessing its quality and to give precise additional information on whether an animal was born and died with precise dates, or whether it arrived without exact knowledge of its age. Hybrids and the commonest domestic animal are not included, but subspecies are delineated. Usually, the oldest animal is listed as follows, for example:

> *Tapirus pinchaque*. Mountain - or Woolly Tapir; 0.1 Wilhelma Zoo, Stuttgart, 8 May 1969 - died 29 Jan 1997 wb - 1968 Ecuador - 27 y 8 m (<29 y)

The text is in English and is easily reviewed; there is an excellent index and modern taxonomy is employed. I can heartily recommend this excellent book. It is available by Air Mail from the address listed above. And, yes, checks in U.S. dollars are accepted. Price includes postage to U.S.

Encyclopedia of Animal Behavior (Volumes 1-3)
Edited by Marc Bekoff
Foreward by Jane Goodall
Greenwood Press, 88 Post Road West, Westport, CT 06881
ISBN 0313327459 Three volumes $349.95

Review by Diana Guerrero, Independent Behavior Consultant
Ark Animals of California, Big Bear Lake, CA

Released in 2005, the *Encyclopedia of Animal Behavior* had to be a daunting task to put together. The three volumes provide an introductory overview on various behavior topics. I don't envy the editor (Marc Bekoff) who bravely tackled the task.

Anyone interested in animal-related topics will find this three volume set useful. The up-to-date information contains contributions from many experts in a variety of fields. Entries include submissions from disciplines such as ethology, psychology, biology, veterinary medicine, behavior and others.

One major difference is that it includes dialog regarding animal emotions, awareness, consciousness and empathy. These have been taboo topics in the past. The other nice aspect of this work is the wide range of material it introduces. Regular behavior topics such as social organization, behavior patterns, animals as individuals and as a species, domestic and wild animals, and other related subjects, such as careers, are included.

The book is user-friendly with reasonably sized articles, short sidebars and provocative essays. It is a good introductory work and I'd recommend it for resource libraries, students and those who want a light overview.

The Snakes, Lizards, Turtles and Amphibians of Fort Riley and Vicinity
Second (Revised) Edition; pblished DEcember 2005
By William H. Busby, Joseph T. Collins & Gibran Suleiman
with photographs by Suzanne L. Collins
Kansas Biological Survey, University of Kansas, Lawrence,KS
84 pgs, 72 color photos, one map and bibliography

The Fort Riley Military Reservation is a 101,000-acre tract in the northern Flint Hills region of north-central Kansas that sports a diverse herpetofauna composed of 52 species—one salamander, ten frogs and toads, seven turtles, nine lizards, and 25 snakes. For that reason, the Kansas Biological Survey at the University of Kansas is pleased to announce the publication of a new edition of "The Snakes, Lizards, Turtles, and Amphibians of Fort Riley andVicinity" by Bill Busby, Joe Collins, and Gib Suleiman. Originally published in 1996, this completely revised edition is profusely illustrated with 72 exquisite color images, most by noted wildlife photographer Suzanne L. Collins of Lawrence.

This book reveals the natural history of the amphibians, turtles, lizards, and snakes that abound in and around the Fort Riley Military Reservation in the beautiful Flint Hills of north-central Kansas. A must for all those interested in wild places and the creatures that roam them.

For greater comprehension and ease of use, this book adopted the standard common names for Kansas species as listed in Collins & Taggart (2002, Standard Common and Current Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians. Fifth Edition).

Single copies of the 84-page book are available **free** by writing to the Fort Riley Conservation Office, Building 1020, Huebner Road, Fort Riley, KS 66442. Please include a self-addressed 7x10-inch envelope with $2.00 U.S. postage attached.

The 2006 Conservation Endowment Fund (CEF)

Application is now available on the AZA website at http://www.aza.org/ConScience/WhatIsCEF/. Several changes have been made to the application, so be sure to use the 2006 version. Also note that this year's deadline is close of business EDT on 3 April 2006. In addition to the 2006 application, several resources for applicants have been added to the website. Questions should be sent to cef@aza.org.

Please forward this announcement to anyone who might be interested in applying; we welcome applications from within and outside of AZA.

Rectal Prolapse in a Greater Indian Rhino *(Rhinoceros unicornis)* at the Toronto Zoo

By
Anna Christie and Karyn Tunwell, Keepers
Toronto Zoo, Toronto, Ontario, Canada

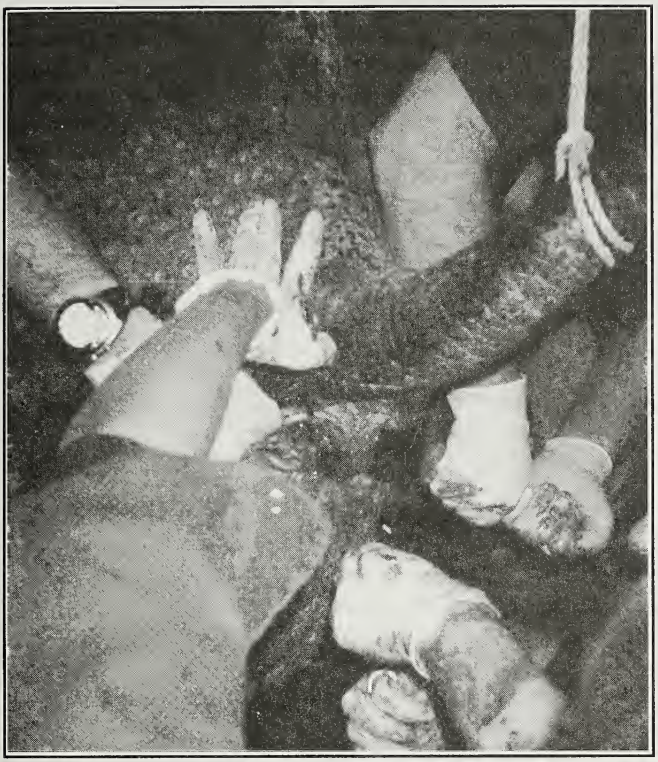
The Toronto Zoo currently houses 1.1 Indian rhinoceroses - Patrick, a 31-year-old male, and Indira, a 30-year-old female. Keepers working with these animals have established a trusting relationship with them as a result of close daily positive interactions. This relationship played a major role in the successful outcome of a potentially life-threatening situation when the male, Patrick, had to undergo two surgeries for a rectal prolapse in February 2002.

Part of the daily husbandry routine with these rhinos involves tactile interactions such as brushing, rubbing, and showering. Brushing begins with keepers standing outside of the pen and continues until the rhino is calmly lying down. At this point two keepers will enter the pen. While one continues to brush and watch for signs that the rhino may get up, the other checks the rhino's feet and other areas for potential problems. At this time any topical medications can be applied if necessary. Behind-the-scenes tours of the rhino house have also helped to introduce the animals to a variety of people making them comfortable with anyone who enters their area.

Patrick's prolapse. *(Photo by Des Maguire)*

In 1989 the Toronto Zoo acquired Patrick, a 15-year-old male Indian rhino, on breeding loan from the Bronx Zoo in New York. Despite being in good physical condition, Patrick suffered from recurring rectal prolapses at both zoos. This condition occurs when the lower end of the rectum turns itself inside out and protrudes from the anus. Rectal prolapse is often associated with extended periods of constipation and excessive straining. In 1976, Patrick's mother underwent extensive surgery for a rectal prolapse at the National Zoo in Washington D.C. Based on his family history, Patrick may have a hereditary predisposition to this condition. Patrick most often prolapsed when he was relaxed and lying down and normally the swollen tissue protruding from the rectum would recede upon standing and no medical treatment was required.

On the morning of 8 February 2002, the keeping staff observed that the prolapsed tissue did not withdraw on its own so the veterinarian was called. After examination and with keeper assistance, the tissue was guided back into the rectum by hand. The next morning the prolapse had recurred. Patrick appeared to be uncomfortable as the exposed tissue was quite swollen and fresh blood was present. The vet once again replaced the tissue, but by noon Patrick had re-prolapsed. After discussions between the veterinary and keeping staff, it was decided he required immediate surgery. Prior to receiving the anesthetic, keepers began



Patrick's Surgery on 9 February 2002

brushing Patrick in order to relax him and allow the vet to administer the sedative directly into the hind leg. To ensure he remained calm, two keepers entered his pen and continued brushing and stroking him until he was lying down, approximately 20 minutes later. Anticipating a lengthy surgery, he was maintained at a light level of sedation. During the three-hour surgery, the vets removed approximately one kilogram (2.2 lbs.) of vascularized tissue and performed a resection of the rectal wall. Patrick was standing calmly within 10 minutes of receiving the reversal drug.

On 10 February, 24 hours after the surgery, Patrick was sluggish but appeared to be in good spirits. In order to decrease the rhino's gastrointestinal activity, roughage (hay) was removed from his diet and his food intake reduced. A mixture consisting of oral antibiotics, fiber cubes, alfalfa cubes, apples and carrots, and one litre of mineral oil, was offered four times that day. During the day, a small amount of feces was passed without the presence of blood or further prolapse. Upon palpation, the incision felt secure and the prognosis looked good. Unfortunately, during morning rounds the next day, Patrick was found to have prolapsed again, most likely while defecating. The floor of his pen was covered with blood and there was a small amount of feces. It was estimated he lost between 7 and 10 liters (14-21 pints) of blood during the night most likely from pressing up against a wall causing the prolapse to rupture. Patrick was once again immobilized and the torn tissue was cleansed and re-sutured. This time Patrick took a couple of hours to recover from the anesthetic and several hours later he passed approximately one litre of blood while defecating. Patrick was bright, alert and responsive the next morning. There were no signs of a prolapse but a few large blood clots were passed throughout the day. The medicated diet was offered once that day with the addition of an iron supplement due to Patrick's significant blood loss. Small amounts of blood and large quantities of feces were passed overnight, and once again rectal mucosa had prolapsed. The tissue was easily replaced, however it became apparent that a different portion of the rectal wall was involved.

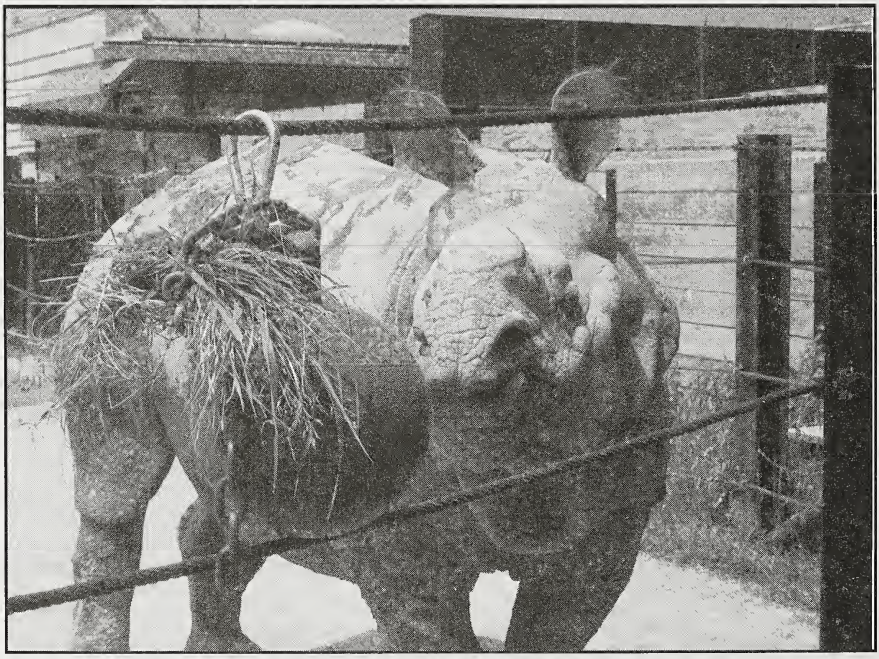
At this time the keepers were informed that Patrick's condition would deteriorate if the tissue were to prolapse and remain exposed for an extended period of time. This would result in increased susceptibility to infection, and any prolapsed tissue could further dilate and become engorged with fluid preventing it from being safely re-inserted. Patrick might also cause additional injury by rubbing the irritated tissue against the wall of his pen while defecating. The decision was made to provide Patrick with 24-hour keeper care. His feedings were decreased from four to two times daily to further decrease gut motility, and mineral oil was increased to two litres. Apples were removed from the diet for fear that they might† ause flatulence. Overnight on 13 February, Patrick prolapsed every hour, always while lying down. The keepers on duty allowed him to remain sleeping, but monitored the tissue for swelling. When the prolapsed mucosa became enlarged, Patrick would be made to stand so that the tissue could be gently directed back into the rectum. To do this the keepers on duty

would begin scrubbing him with a long handled brush then move closer and rub with their hands. While one keeper continued to do this, the other would re-insert the prolapse which always went in easily. Patrick showed no aggression during any of these interactions and always seemed to 'know' his keepers were a source of relief for him. Throughout the day of 14 February, Patrick prolapsed three times while defecating. Keepers monitored the prolapse for swelling but luckily the tissue receded on its own without assistance each time. Due to the mild weather, Patrick was given access to the paddock where he was allowed to exercise for three hours. Through the night he defecated five times and prolapsed only once and required no keeper assistance. During the next 24-hour period he prolapsed on four occasions and only once was keeper assistance necessary to guide the tissue back into the rectum.

During the next 48 hours, Patrick did not prolapse. Through rectal palpation, the sutured tissue appeared to be less swollen and seemed to be healing well. On 18 February, one week since the last surgery, the veterinarian increased his rations to normal amounts and frequency and decreased the amount of mineral oil being added. Four days later timothy hay was slowly reintroduced and the antibiotic treatment ceased. Patrick had not prolapsed in 14 days, and by 2 March he appeared in excellent health and was consuming his regular diet.

Many factors contributed to the successful resolution of this serious medical condition. These include the skill and experience of Toronto Zoo's veterinarians and the open and effective communication between veterinary and keeping staff. Without the dedication, commitment and professionalism of the keeping staff, seen in their willingness to provide the necessary 24-hour care that Patrick required, his health might not have improved as quickly. It is also important to note that the daily interactions between the keeping staff and the Indian rhinoceroses, which at times may have seemed routine, played a critical role in Patrick's treatment and recovery. It acclimated the rhinos to a wide variety of situations so that handling during a crisis such as this, was better tolerated by both the rhino and the keepers. These factors, as well as Patrick's good nature, ensured a successful outcome to this case.

Update: Patrick has now been 'prolapse-free' for 3 1/2 years.



A recent photo of Patrick shows a healthy animal no longer troubled by rectal prolapse.
(Photo by Karyn Tunwell)

Chapter News Notes

AAZK Milwaukee Chapter

In October, we continued our fundraising efforts in the form of our annual Halloween caramel apple sale. We raised $458.00 which will be donated to the Animals in Asia Foundation.

In November, we hosted another pizza dinner and auction which was another hit with our zoo staff and volunteer corps - especially since we made the pizzas ourselves this time! Our members made an extra contribution by adding on home baked desserts. A large variety of donated items filled the silent auction tables, and more than $800.00 was raised to donate to the Bongo Reintroduction Program.

— Earl Conteh-Morgan, Chapter Liaison

California Desert Chapter of AAZK

The California Desert Chapter had a busy fall season. We continued our lecture series, featuring Joan Scheier on November 10th. Author of a fascinating book on the history of The Central Park Zoo, Joan's presentation was well received. After her talk she sold signed copies of her book. Joan's latest book, a history of New York City Zoos and Aquariums will be out in this month..

On December 8th, we featured a PowerPoint® presentation on avian influenza. Carol Cardona, DVM, PhD, Dipl. ACPV, gave a very informative, balanced, and engaging lecture on "Bird Flu and You." A poultry veterinarian working out of the Extension Office at UC-Davis, Dr. Cardona cut through the hype and hysteria of bird flu, patiently answering the audiences' many questions.

Palm Desert City Council member, former mayor, and Living Desert trustee Buford Crites gave a thorough look at conservation issues in the Coachella Valley. Speaking on January 18th, he focused on the Coachella Valley Multi Species Habitat Conservation Plan. His presentation explained the broad scope of this measure and how it would balance conservation and development for the next 75 years.

Speaking on a very timely subject for Southern Californians, on January 25th we welcomed Christa Mann of the Mountain Lion Foundation. Based in Sacramento, CA, the Mountain Lion Foundation serves to protect mountain lions by scientific research, habitat protection, and most importantly, education. By explaining the life history and natural history of cougars in California, Ms. Mann showed how increasing human population is causing problems for cougar populations in Southern California. By learning what to do and what not to do in cougar country, the audience gained a better understanding and appreciation of these magnificent creatures.

Our second annual gingerbread house raffle netted close to $200.00. Chapter Secretary Stacey Feige handmade an animal themed gingerbread house, with raffle ticket sales to support our ongoing lecture series.

The three Chapter delegates who were planning on attending the 2005 conference in New Orleans donated 100% of their conference fees to the Audubon AAZK Chapter.

—-Jeremy Konwiser, Vice-President

St. Louis Zoo AAZK Chapter

What an exciting and successful year 2005 was for the St. Louis AAZK Chapter. We were thrilled with the success of our Bowling for Rhinos event. Our turnout was great and everyone had a wonderful time. We've raised over $6,000, a 20% increase from our 2004 event. This accomplishment has inspired us to attempt to fill an entire bowling alley at our next BFR event in May 2006.

Throughout 2005, we have continued with our speaker series. Once a month we invite researchers, curators, keepers, or anyone with interesting ideas to come speak at a brown bag lunch. Keepers and zoo staff are able to learn more and participate in our local Chapter. Several of our speakers are conservation center coordinators for the zoo. This past year we have donated $200.00 to the Horned Guan Conservation Project and $100.00 to the Armenian Viper Conservation Project.

We have continued posting our "AAZK Conservation Thought" flyers around the zoo.

Each of our flyers is designed to give people ideas of small tasks that can be accomplished individually to reduce, reuse, or recycle. One of our biggest hits was "When you chug it, mug it" to ask people to use coffee mugs instead of disposable cups for their morning coffee.

In addition to supporting the conservation centers, we have continued collecting and recycling cell phones for the Balikpapan Orangutan Society (BOS). Our distribution center has been very helpful in assisting us with this ongoing effort. Our Chapter was deeply touched and honored to receive a $250.00 conservation award from the St. Louis Zoo in recognition of our conservation efforts. We donated this money, along with $700.00 donated by zoo employees, to the relief efforts for Hurricane Katrina.

The year 2005 started a new fundraising strategy for our Chapter. We began selling animal artwork outside science lectures given by the zoo. Our animal artwork included paintings by hippos, rhinos, orangutans, and penguins. We also had cement footprints of cheetahs, hippos, elephants, and tigers. Our zoo was very supportive of this fundraiser, and helped secure segments about the animal artwork on two local television shows. Many of our docents and volunteers were thrilled with the opportunity to purchase these unique items and with their generous donations, we have raised over $1,000.00. The demand for these items was so great that we added a link to our website to keep up with the orders.

We are looking forward to an even more exciting year in 2006, and we wish every AAZK Chapter to have a very successful year.

Our Officers for 2006 are:

President.....Tammy Schmidt
Vice President.....Rick Smith
Secretary.....Melissa Pritchett
Treasurer.....Christy Poelker
Conservation Officer.....Sarah Christeson
Liaison.....Lily Civili

--Lily Civili, Chapter Liaison

San Diego AAZK Chapter

Since September, our Chapter has kept its hands dirty with many worthwhile projects, fundraisers, speakers, etc. Over the course of 2005, seven keepers received up to $250 in assistance to help defray the cost of conference fees and travel expenses. Proceeds from one of our swap meets even helped support a keeper travel to Churchill to participate in the Polar Bear Science Leadership Camp.

In November, we held our bi-annual "Wine Steals" fundraiser at a local wine bar to benefit the California Wolf Center (C.W.C.) in Julian, CA. As always, a plethora of excellent food was donated from four local restaurants that continually support our fundraisers. Additionally, a wide assortment of silent auction items including eight great hotel accommodations, paintings, gift certificates, and much more raised $2,000 to assist the C.W.C. pay the shipping expenses for four newly acquired Mexican wolves.

A wonderful perk of SD AAZK membership is the ability to ride along on an exclusive photo caravan tour of the San Diego Zoo's Wild Animal Park (W.A.P.) in Escondido, CA. This adventure occurred in October when 18 members and guests joined W.A.P. staff in photo caravan trucks, and headed into the African and Asian Plains exhibits. With your truck being the only

barrier from rhinos, giraffes and many exotic animals, words are hard to explain this thrilling experience. Check out our newsletter on the SD AAZK website to see great pictures from the caravan.

To educate our members, we strive to bring in great speakers. Most of you know Steve Martin from Natural Encounters, Inc. In December, Steve gave an eye-opening presentation on "The Art & Science of Training" as well as enrichment. This talk was packed with tons of animal lovers and professionals who couldn't wait to see Steve provide his insight. With such a great turnout, the San Diego Zoo catered food and beverages while we held another silent auction prior to Steve's presentation.

In January, Mark Johnson DVM who has worked with the California Wolf Center, gave a unique presentation on animal restraint and immobilization in the wild. Many of Mark's experiences trapping and tagging bears for wildlife studies were caught on video for us to marvel at.

Over the next few months our members will enjoy talks from our own board member and animal care supervisor of the Children' Zoo at the San Diego Zoo, Nicki Boyd. Both Nicki and Brian Williams, founder and executive director of the Red Panda Project, will present on the Wildlife Expose. Additionally, Dr. Paul Ponganis (who you may have seen in the special features section of the recent movie, "March of the Penguins") will present on his Emperor penguin studies in Antarctica.

Needless to say, this year is already shaping up to be an exciting one. Stayed tuned for our latest and greatest undertakings. SD AAZK Website: www.sdaazk.org< Please check it out for event pictures, articles, and much more.

--Matthew Akel, Fundraising Chair & Chapter Liaison

Knoxville Zoo AAZK Chapter

This past year was an eventful one for our Chapter. In the spring our AZA Regional Conference was held at Knoxville Zoo and our members stayed busy helping to host it.

Our next efforts were focused on getting ready to participate in one of the zoo's annual summer fundraisers "Feast with the Beasts." At this event AAZK held a silent auction with several amazing packages ranging from gift certificates that had been donated by local businesses to unique items like animal artwork and hand-crafted jewelry. We made almost $3000 on this successful night and then gave half of the money to our zoo fund. Soon after we gave $1000 to the AAZK, Inc. Hurricane Katrina Relief Fund.

Towards the end of the year our Chapter was involved in two of our zoo's annual holiday events "Boo! at the Zoo" and "Milk and Cookies with Santa." We have been involved with these events for the past several years and they have always been a big hit. AAZK members were in charge of taking polaroid pictures of the kids, allowing them to go home with an instant memory of the fun they had. Collectively we raised about $2000 from our photo booths. This next year promises to be another eventful one with planning membership events and potential fundraisers already in motion.

2006 Officers are:
President.....David Backus
Vice President.....Jessica Clowers
Treasurer.....Traci Marshall
Secretary.....Melissa Newkoop
Membership.....Karmen Bowman

--Melissa Newkoop, Secretary

What's your Chapter been up to? Let us know about your successful fundraisers, guest speakers, conservation projects, new officers, new logos, etc. Do you have a new logo you want to show the membership?
We want to hear from you!
Send your Chapter News to the *AKF* Editor at:
akfeditor@zk.kscoxmail.com

Institutions wishing to advertise employment opportunities are asked to send pertinent data by the ***10th of each month*** *to: Opportunity Knocks/AKF, 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054. Please include closing date for positions available, and when setting these dates keep in mind that because of bulk-mail, most readers do not receive their AKF until the middle of the month or later. There is no charge for this service and fax or e-mail listings of positions which become available close to deadline are accepted. Our Fax is (785) 273-1980; e-mail: akfeditor@zk.kscoxmail.com< Listing must be sent as MS Word attachment. To post a position on the AAZK website, have listing to email address above by the 25th of the month for posting on the first day of the following month. We are no longer located at the Topeka Zoo, so please note new address to avoid delays in processing.*

Full-time Warden - Six Flags Great Adventure Wild Animal Safari Park, Jackson, NJ
Interested candidates should submit a resumé to: Karol Kempke, Human Resource Manager, P.O. Box 120, Jackson, NJ 08527. We are seeking applications for a full-time Safari Park Warden. The Safari Park consists of 1200 animals including birds, reptiles and mammals. **Responsibilities:** Applicants must have the ability to feed animals, clean houses, and general surroundings. **Requirements:** Applicants must have strength, ability and alertness to work with various species of animals within a Safari Park. Must be 18 years old, have valid driver's license, possess the ability to perform assigned duties in a safe & productive manner and be able to work in all types of weather conditions. Six Flags Great Adventure offers an excellent salary and benefits package. Six Flags is an "Equal Opportunity Employer"

Lead Animal Keeper - Oakland Zoo, Oakland, CA
To apply, send resumé and cover letter to: Colleen Kinzley, General Curator, Email: colleen@oaklandzoo.org or mail to Oakland Zoo, P.O. Box 5238, Oakland, CA 94605; or Fax: (510) 636-9619. **Open until filled. Position Responsibilities:** The Lead Keeper will spend the majority of his/her time in supervisory and administrative tasks. He/she will use leadership skills in interactions with others. He/she will be responsible for supervising the Reptile and Amphibian Building and Invertebrate building in the new Children's Zoo as well as the rest of the Children's Zoo (bats, lemurs, otters and domestic animals). S/he may also supervise additional strings elsewhere in the zoo. Staff within those areas will report directly to the Lead Keeper. He/she will perform job performance evaluations with staff in his/her work section. He/she will be available to assist in procedures and projects, answer questions, facilitate maintenance or grounds work, etc. The Lead Keeper will cover these areas as a floating keeper as necessary. This is a salaried position. At times it will be necessary to work extended hours or days to fulfill the job requirements. The Lead Keeper is also responsible for various administrative and future planning tasks as assigned by the curator. He/she should be capable of taking charge of the Department and addressing all potential problems and emergencies. **Job Requirements**: Minimum of five (5) years experience in the care of wild animals in an AZA-accredited facility; Two (2) years experience as a supervisor - responsible for training supervision, providing performance feedback and conflict resolution; good physical condition; able to lift a minimum of 50 lbs. (i.e. feed sack) and move a minimum of 120 lbs. (i.e. hay bale); valid driver's license and clean driving record; willingness to work outside normal business hours, including weekends and holidays; good written and verbal communication skills; knowledge of the habits and hazards of working with zoo animals; willingness to work with some physical risk while observing proper safety precautions; good organizational skills; able to manage multi-tasks/projects; substantial experience and thorough knowledge of capture and restraint techniques; thorough understanding of behavioral training theory and practical application; and thorough understanding of safety procedures used with captive wildlife. **Experience and Qualities Preferred:** Bachelors degree in zoology, biology or a related field and experience in care and management of reptiles, amphibians and/or invertebrates. **Salary and Benefits:** $35,360. Medical, dental, life insurance and 401K retirement benefits. Two weeks vacation. Full-time, regular position.

Animal Keeper (2 positions available), Philadelphia Zoo, Philadelphia, PA
To apply, send cover letter and resumé to: Human Resources, the Philadelphia Zoo, 3400 W. Girard Ave., Philadelphia, PA 19104-1196; Fax 215-243-5219; e-mail- zoojobs@phillyzoo.org **Responsibilities:** This is an open relief position that is assigned primarily to mammal areas. The Keeper is responsible for all aspects of daily animal care including but not limited to cleaning, feeding, watering, observation and exhibit maintenance. **Requirements:** The qualified candidate will have a degree in biology or a related field and a minimum of one (1) year of work experience with captive animals in an AZA-accredited institution. **Compensation:** $17.31/ hour plus benefits

Education Program Coordinator/Small Animal Keeper – Wild Things A.R., Inc., Salinas, CA (small, privately-owned facility) POSITION AVAILABLE NOW. Deadline for application is 31 March 2006. Send resumés to: Wild Things A.R., Inc., 400 River Road, Salinas, CA 93908 FAX 831-455-1902 or

email heather@wildthingsinc.com< We are a hardworking staff caring for many animals. We are looking for another extremely dedicated – hardworking person to join our team. **Responsibilities**: Requires applicant to handle all animals to include reptiles, birds, small mammals and assist in the handling of larger mammals to include elephants, big cats, bears, etc. Daily duties include cleaning, diets and all activities involved with running a full-time educational program and daily tours both on and off site. **Requirements**: Must be physically fit and able to work weekdays, weekends, holidays, and evenings – 50+ hours/week. Must be good with children and public speaking. This is a privately-owned facility. Animals are handled free contact. Learn more about the facility and the position by visiting our web site at www.wildthingsinc.com. Experience in both animal handling/husbandry and educational/outreach programs preferred. Pay rate: Approx $11-13/hr. No medical/no relocation compensation.

Veterinary/Laboratory Technician - Philadelphia Zoo, Philadelphia, PA
To apply, please forward your cover letter and resumé to: zoojobs@phillyzoo.org or: Human Resources, The Philadelphia Zoo, 3400 West Girard Ave., Philadelphia, PA 19104; Fax 215-243-5219. The Philadelphia Zoo seeks an experienced Veterinary/Laboratory Technician to join our veterinary care team. **Responsibilities:** Under the direction of the Senior Veterinary/Laboratory Technician, this position provides technical and medical support/assistance in the care and treatment of all animals in the collection; maintains veterinary facilities, equipment, veterinary records and supplies; assists with immobilizations, surgeries, treatments and radiology; assists the pathology department with laboratory tests on samples, care of hospitalized animals and assists with the care and raising of baby animals as required. **Requirements:** Include a degree from an accredited veterinary technician program, AHT certification required, PA certification or certification eligible with a minimum one (1) year; clinical experience in the animal health field. Experience in microbiology and parasitology, working with captive exotic animals, avian/reptilian hematology preferred. Zoo experience preferred; interest in continued professional growth and ability to conduct assigned and/or related research projects concurrently with regular job responsibilities; excellent technical/nursing skills; methodical and detail-oriented; ability to train students and volunteers in animal health techniques and practices, and strong administrative and organizational skills. **Salary/Benefits:** The Philadelphia Zoo offers a competitive compensation package including medical, dental, vision, short- and long-term disability, a 401K with employer match and tuition assistance.

Large Mammal Internships (3 available) – Zoo Atlanta, Atlanta, GA
Resumés should be sent to the attention of Human Resources, Zoo Atlanta, 800 Cherokee Ave. S.E., Atlanta, GA 30315; or emailed to employment@zooatlanta.org. ***Resumés will be accepted for these positions 1 March – 14 April 2006.*** Qualified applicants will be notified for interviews by 1 May 2006. Hourly wage for interns is $10.51/hour. Internships start 1 July 2006 and follow the time frame listed below. Housing for out-of-state candidates will not be provided. This Professional Internship program at Zoo Atlanta is designed to fulfill the needs of the mammal departments during the late summer months that coincide with our giant panda birth watch. The program will expose career-oriented individuals to all facets of Zoo Atlanta's operation with a primary focus on animal husbandry and management. While in the program, interns will be exposed to: Animal Husbandry,Veterinary Care, Basic Operant Conditioning Training and Environmental Enrichment; Animal Record Keeping; AZA Conservation and Science programs; Zoo Education/Guest Services/Public Relations; and Zoo Maintenance/Zoo Horticulture. **Requirements:** The time requirements for these positions are as follows: Each position will work 40 hours per week for a minimum of nine (9) weeks for a total of 360 hours. (Program may be extended to a maximum of 1200 hours if during this time the giant panda gives birth.) The program has a two-week training period, after which the intern will be treated like a full-time keeper, and be allowed to carry keys, shift animals, participate in daily routine, and observe veterinary procedures that occur in the assigned area, etc. All paid interns must be 18 years of age or older, and preferably a graduate of an accredited college degree program. Experience with animals in some capacity is preferred. All paid interns will be required to undergo TB testing and have a valid drivers license.

Animal Keeper/Internships Positions - Shell Factory Nature Park and Botanical Trail, North Ft. Myers, FL
We are a new little park that is growing FAST! We have been open just over a year and we have a variety of both wild and domestic animals to care for—Starting pay is $7.50/hr. We are looking for full and part-time applicants. Experience preferred. Please submit your resumé to danika@shellfactory.com or bring it and apply in person at 2787 North Tamiami Trail, N. Fort Myers, FL 33901 (239) 995 2141 ext 545.

Exotic Cat Internship – Center for Animal Research and Education, Bridgeport, TX
To apply for this position please send your resumé and references to Attn: Heidi Riggs, 245 County Road 3422, Bridgeport, TX 76426. C.A.R.E. is currently looking for qualified interns for 2005 and 2006. The Exotic Cat Internships run in 90-day sessions that allow for experience in the zoological field. C.A.R.E.

provides housing for all accepted applicants. For more information please see website at www.bigcatcare.org. **Responsibilities**: Assisting the Curator and Executive Director in planning and coordinating the care, diet, and maintenance of the habitats for exotic felines. Job duties include cleaning, food preparation, maintenance of enclosures and education work with the public. **Requirements**: Candidates must have good written/oral communication skills and the ability to work effectively in a team–oriented environment. Must have or working on a four-year degree in related field. All candidates must have the ability to lift 50 pounds and a willingness to work outdoors. Weekends and holidays are required.

Marine Mammal Internship – Pt. Defiance Zoo & Aquarium, Tacoma, WA
Please contact Jennifer Mack, Assistant Volunteer Coordinator, Education Department, 5400 No. Pearl St, Tacoma WA 98407 or volunteer@pdza.org for an application packet. The intern program in the Rocky Shores Tundra habitats at the Point Defiance Zoo and Aquarium is designed to provide participants with practical learning experience and knowledge in the field of animal husbandry and training (with an emphasis on marine mammals). In return, the intern makes a significant contribution to the Rocky Shores/Tundra area at the Point Defiance Zoo and Aquarium. Positions are available year-round. This is an **UNPAID**, full time position requiring a **minimum** of 10 weeks and 400 hours. Under the guidance of experienced zoo staff, the internship is designed to provide instruction and eventually independent, hands-on experience in the following areas: Care of Animal Habitats, Nutrition and Diets, Environmental Enrichment, Public Presentation/Interpretation,Water Quality and Filtration, Animal Behavior and Natural History and Animal Training and Husbandry.

Aviculture Interns Wanted - The Hawaii Endangered Bird Conservation Program at the Keauhou Bird Conservation Center (KBCC) on the Big Island of Hawaii and the Maui Bird Conservation Center (MBCC) on the island of Maui. For more information on internships at KBCC, please send a resumé, cover letter and the names and contacts of three (3) references to: Tracey Goltz P.O. Box 39 Volcano, HI 96785 or fax: 808-985-7034. For more information on internships at MBCC, please send this information to: Richard Switzer 2375 Olinda Road Makawao, HI 96768 or fax: 808-572- 3574. **Responsibilities**: Daily tasks include husbandry duties such as: diet preparation, aviary and facility maintenance, behavioral observations of breeding birds, grounds keeping, predator control. **Requirements**: Applicant must be able to live with several roommates in a remote area and should show enthusiasm for work with captive endangered Hawaiian birds. Applicant must have a valid driver's license and health insurance. Internships last for a 3-6 month period. Interns receive $20/day stipend plus housing.

Big Cat Internships - Tiger Creek Wildlife Refuge, Tyler, TX
For more information or to download an Application Packet, see http://www.tigercreek.org/internships.html, no telephone calls please, all applicants must complete the Application Packet process for consideration of program participation. The Big Cat Internship as seen on Animal Planet involves Animal Care Apprenticeship and Public Educational presentations involving Big Cats This is a 90-day position (by 4 quarters/terms) allowing one to gain experience in the zoological field. **Responsibilities:** Job duties include cleaning, diet preparation, light maintenance, educational tours, etc. Interns are responsible for the daily cleaning and health monitoring of a large number of exotic feline species including but not limited to tigers, lions, leopards and pumas. Big Cat Internship opportunities also include working in environmental education with schools and youth groups in a variety of learning activities. Interns will present short guided lessons on animal care techniques, conservation and rescue methods, backgrounds on the big cats and much more. This wide variety of teaching opportunities and educational training provides the intern with an exciting array of new skills and experiences. Training is provided by the staff. **Requirements**: At least two (2) years of undergraduate college work in wildlife management, education, biology, or related field. If no college experience then two (2) years of verifiable work experience in unrelated field or one (1) year of work experience in animal care field. All applicants must be at least 20 years of age by start date. These positions require motivated persons with a career focus in biology/zoology/wildlife management. Housing is provided for these non-paying positions. Interns provide a strong commitment to the refuge, with a six- day work week and light duties on Sundays.

Environmental Interpretation and Wildlife Care Internship - Trailside Museums and Wildlife Center, Bear Mountain State Park, Bear Mountain, NY 10911-0427
Contact: Jennifer Verstraete at (914) 786-2701 ext. 278 or 265; email - elayne.keith-feller@oprhp.state.ny.us. Start Dates: Summer internship mid-May through mid-August; Fall internship late-August/early September through early November. Internship is unpaid, but provides knowledge and experience; written evaluation gladly given. Possible course credit if intern can arrange it. Interns will work at least three (3) days a week, including one weekend day. No housing available. We reimburse full

payment for required pre-exposure rabies series. **Qualifications**: Enthusiasm, comfortable handling animals, motivated to learn. Must be 18 or older; preference given to college student looking for experience in the care of wildlife and in environmental interpretation. **Responsibilities**: 1) Provide care for permanently injured or orphaned park wildlife (mammals, birds, fish, amphibians and reptiles) in zoo setting. Under the supervision of a Senior Zookeeper will prepare food and diets, maintain enclosures and exhibits, and provide enrichment; 2) Interact with the public answering questions, interpreting exhibits, possibly developing and offering short interpretive talks.

Internship - (Tigers For Tomorrow Exotic Animal Preserve) Fort Pierce, FL
To apply send cover letter and resumé to: Susan Steffens/ Executive Director- Tigers For Tomorrow, 18905 Orange Ave, Ft. Pierce, Fl or email to sue@tigersfortomorrow.org. This non-profit organization is seeking two (2) possibly three (3) student interns for the 2005 fall season. Tigers For Tomorrow is a last stop exotic animal rescue preserve that houses and specialize in big cats. The preserve is in the beginning stages of moving to a new facility, interns will assist management in the move and care of the animals. **Responsibilities**: The intern will assist in the daily husbandry of preserve residents, assist in interpretive talks, work with the public. **Requirements**: Desirable qualifications include the ability to communicate effectively with people, writing skills, orientation to details, and be a self- motivator. Benefits include room and board, and $50.00 a week. Personnel transportation is required.

Big Cat Internship – Big Cat Rescue, Tampa, FL
For more information contact Scott Lope at (813) 323-5991 or email at catfoto1@aol.com. Four (4) positions available for ongoing three-month internships at TAOS-accredited non-profit big cat sanctuary. See www.bigcatrescue.org **Responsibilities**: Include, but are not limited to daily husbandry, exhibit cleaning, diet preparation, feeding, operant conditioning and behavior enrichment for the following species – lions, tigers, leopards, cougars, lynxes, servals, caracals, bobcats, lemurs and other exotic animals. We provide invaluable experience, on-site housing and utilities, safety training and educational materials. Advanced training and long-term employment opportunities exist for the right candidates. Many of our interns have advanced on to careers in the animal field. **Requirements**: Applicant must be willing to work six days a week, some holidays and follow strict safety guidelines. Hard work ethic and love of animals more important than degree.

Naturalist Intern - Alaska Wildlife Conservation Center, Portage Glacier, AK
To apply please send a resumé, and cover letter by March 1, 2006 to Diana Weinhardt, Director of Conservation and Wildlife Programs at Diana@alaskawildlife.org The Alaska Wildlife Conservation Center would like to invite all environmental education, wildlife biology, and outdoor education students, as well as pre-service teachers to become involved with wildlife conservation and environmental education by participating in our Naturalist Internship program. AWCC Naturalist internship typically begins in early May ending dates are negotiable. The position is based on a 40-hour per week schedule and offers a monthly stipend of up to $1,200 a month as well as limited on-site housing. **Responsibilities**: An AWCC Naturalist internship will provide the opportunity to develop and implement interpretive programs with a variety of themes, teach people of all ages on a daily basis, gain exposure to captive wildlife management techniques, learn about wildlife ecology, including interpretation of behavior, complete special projects related to environmental education, connect academic studies and work experiences, assist with the training of volunteers, and gift shop sales are among many other duties. ***Internship Requirements:*** **Education**: Coursework towards a BA/BS in applicable field or equivalent work experience required, with emphasis on ecology, wildlife biology, animal science or environmental/conservation education, is recommended. **Experience**: Demonstrated ability to work with diverse groups. Public speaking and group management skills preferred. **Skills**: Computer skills should include the Microsoft Office. Must be able to communicate effectively both verbally and in writing. **Physical**: Must be able to walk unsurfaced trails, lift 50 pounds unaided, work in the outdoors, sometimes in adverse weather conditions, and work in a standard office setting. Job entails kneeling, bending, standing and walking for long periods of time.

Animal Handling Internship/Wild Wonders Outdoor Theater - Point Defiance Zoo & Aquarium, Tacoma, WA
To apply, please send application form and essay, resumé and two (2)references to: Point Defiance Zoo & Aquarium, Internship Program, 5400 North Pearl St., Tacoma, WA 98407. Application form is available by contacting: Jennifer Mack, Volunteer Coordinator, at the above address or Phone: 253-404-3695; Fax: 253-591-5448; or Email: volunteer@pdza.org Please note that this is an UNPAID internship. ***The deadline for application materials is 1 April 2006.*** The animal handling internship program at Point Defiance Zoo & Aquarium is designed to provide individuals with practical learning experience and knowledge in the field of animal husbandry, animal handling, and public presentations. Interns will handle a variety of birds, reptiles, and mammals and participate in both formal and informal interpretive presentations. In

return, the intern makes a significant contribution to interpretive animal programming at Point Defiance Zoo & Aquarium. The internship is designed to provide instruction in the following areas: Animal Husbandry - General maintenance and upkeep of animal exhibits/enclosures; Animal observations; Nutrition and Diets - Diet preparation; Record Keeping; Environmental Enrichment; Animal Species Knowledge - Natural history; Behavior; and Taxonomic relationships; Animal Handling - Basic handling techniques; Back-up techniques (assisting with animals not handled by intern); Safety practices; and Public Presentations - Informal public presentations; Assisting with theater presentations. **Requirements**: To apply for an animal handling internship at Point Defiance Zoo & Aquarium you must: 1) Be currently enrolled in a college or university, or have recently graduated from a college or university; 2) Have a minimum of one (1) year of course work in a major field of study to be applied during the internship (e.g. biology, zoology, animal behavior, etc.); 3) Be capable of the physical abilities required to work with animals (e.g. lift 50 pounds, frequent bending and stooping, etc.); 4) Provide proof of a current tetanus inoculation and negative TB test; 5) Submit an application; 6) Submit a resumé; 7) Submit two (2) letters of recommendation from an advisor or supervisor; 8) Undergo a phone or on-site interview; 9) Commit to working 40 hours a week for 3 to 4 months; and 10) Interns may be required to work both weekend days. If you have any questions please contact the Point Defiance Zoo & Aquarium Internship Program by phone: 253-404-3695 or email: sluhring@pdza.org.

More Zoo vacancies can be seen by visiting:

American Zoo and Aquarium Association - Job Listings
http://www.aza.org/JobListings/

American Association of Zoo Keepers – Jobs
http://www.aazk.org/animalKeepersForum/opportunity_knocks.php

European Association of Zoos and Aquaria – News then Vacancies
http://www.eaza.net

Australasian Society of Zoo Keeping (ASZK)
http://www.aszk.org.au/Zoo%20Positions%20Vacant.htm

Zoo Vets, Technicians and interns
http://www.aazv.org/job_openings.htm

Bird Jobs in the Field
http://www.birdingonthe.net/mailinglists/BJOB.html

Note from the BFR Coordinator.....

All Bowling for Rhinos event coordinators are asked to send BFR Coordinator Patty Pearthree their updated contact info so she can hook them up with Blue Rhino® folks in their area to help boost their events. She needs contact info **and** event date. Current info she has can be viewed on the BFR website at http://aazkbfr.org. Please email Patty Pearthree ASAP with current info: ppear3@pear3.org.

AAZK is once again fortunate to have the wonderful support of Blue Rhino® which has pledged $20,000 to the 2006 BFR program allowing us to give financial assistance to rhino sanctuaries in Kenya and Indonesia.

AAZK Membership Application *(Please Print)*

check here if renewal [ ]

Name _____

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Mailing Address _____

City _____ **State/Province** ____ **Zip/Postal Code** _____ **Country** _____

U.S. Members

- ☐ **$40.00 Professional** *Full-time Keepers*
- ☐ **$35.00 Affiliate** *Other staff & volunteers*
- ☐ **$35.00 Associate** *Those not connected with an animal facility*
- ☐ **$65.00 or up** - *Individuals* **Contributing/U.S.**
- ☐ **$125.00 or up Institutional/U.S.** *Organizations/Institutions (requires Board approval)*
- ☐ **$125.00 Commercial Members** *(i.e.Animal-related food & supplies)*

Canadian Members

- ☐ **$40.00 Professional** *Full-time Keepers*
- ☐ **$40.00 Affiliate** *Other staff & volunteers*
- ☐ **$40.00 Associate** *Those not connected with an animal facility*
- ☐ **$65.00 or up** - *Individuals* **Contributing/Canada**
- ☐ **$125.00 or up Institutional/Canada** *Organizations/Institutions (requires Board approval)*
- ☐ **Library Only** **$40.00 Library** *Available ONLY to public & university libraries (in U.S.)*

International Members

☐ **$55.00 International** *All members outside U.S. &Canada regardless of category*

Zoo Affiliation (if any) _____

Zoo Address _____

Title _____

☐ **My check is enclosed (AAZK, Inc.)** ☐ **Please charge my credit card**

MASTERCARD **VISA** **Card #** _____ - _____ - _____ - _____

Name on card _____ **Expiration date** _____

Signature _____

Mail this application to: AAZK Administrative Offices, 3601 S.W. 29th, Suite 133 Topeka, KS 66614-2054. Make checks/money orders payable to AAZK, Inc. Must be in U. S. FUNDS ONLY. Membership includes a subscription to *Animal Keepers' Forum*. The membership card is good for free or discounted admission to many zoos and aquariums in the U.S. and Canada.

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AMERICAN ASSOCIATION of ZOO KEEPERS

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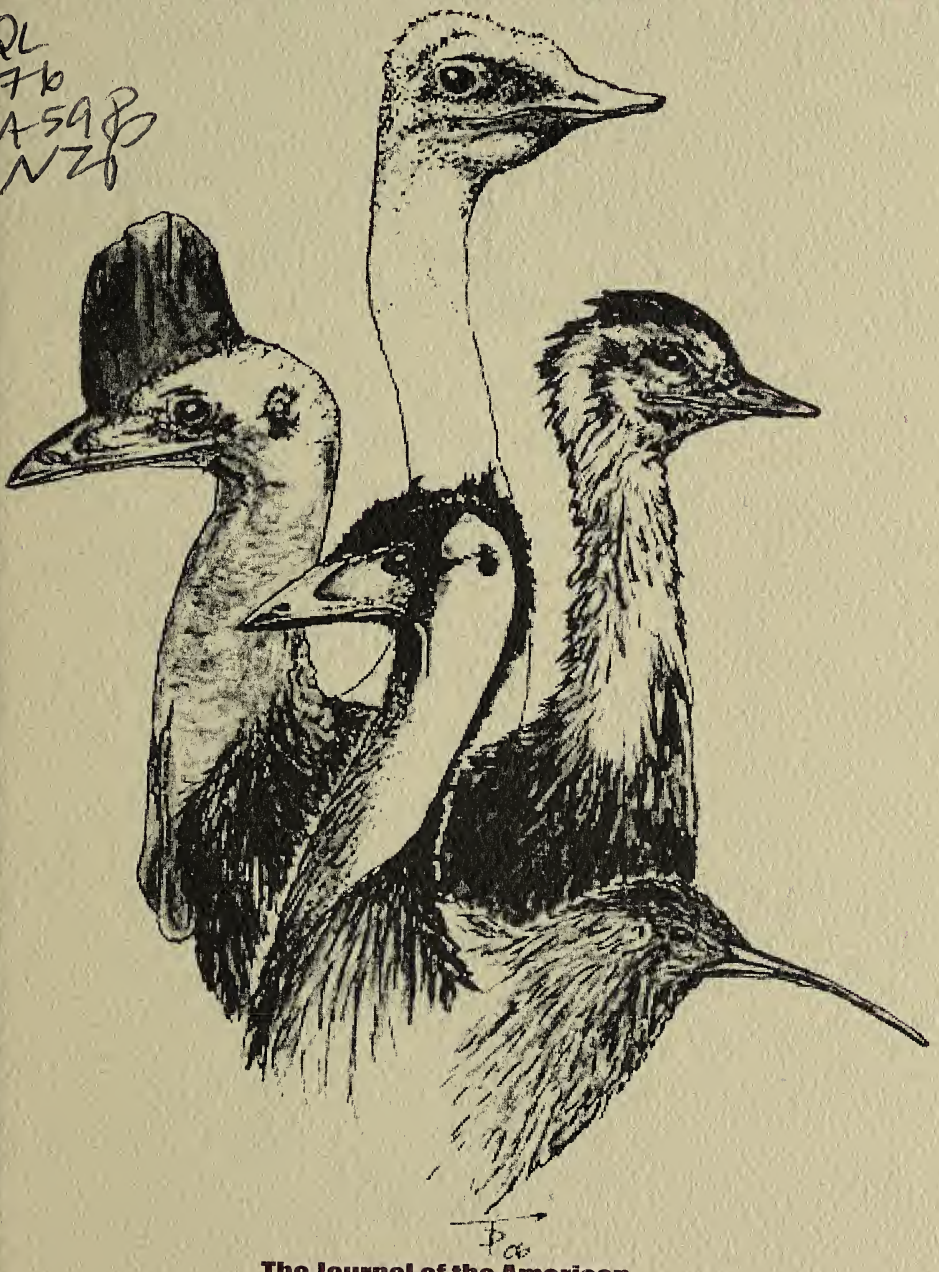

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AAZK PUBLICATIONS - CONTINUING DATA COLLECTION

Resources for Crisis Management in Zoos & Other Animal Care Facilities, Vol. 2 - Susan D. Chan, Topeka, KS; William K. Baker, Little Rock Zoo, AR; Diana Guerrero, ArkAnimals, Big Bear Lake, CA

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About the Cover.....

This month's cover features a group of birds known as Ratites drawn by Debi Talbott, a Keeper at Smithsonian's National Zoo in Washington, DC. This group includes Ostriches, Rheas, Cassowaries, Emus and Kiwis. All of these birds are flightless as they lack a keel for the attachment of large flight muscles. The Ostrich is the largest of all birds, not just ratites, weighing between 90-150kg (198-330lbs.) depending on sex, and they have the largest eyes of any terrestrial vertebrate. The Rhea is sometimes referred to as the "South American Ostrich" and are smaller weighing between 15-25kg (33-55 lbs.). They are good runners and suprisingly good swimmers as well. The Emu and Cassowary are found exclusively in Australasia. The Cassowary is distinguished by their prominent casques and their flight feathers have been reduced to nothing more than long spines. The Emu is the second largest living bird weighing between 30-55kg (66-121 lbs.). Like the Cassowaries, the Emu also have double-shafted feathers which give the appearance of hair in the way it hangs down. The Kiwi is the smallest of this group of birds and is endemic to the islands of New Zealand. Unlike the other ratites, the Kiwi is nocturnal, with poor vision but a sharp sense of smell and hearing. Kiwis are exclusively monogamous and lay one of the largest eggs in the bird world relative to its body size. This artwork has been adopted by the Ratite TAG as their new logo. Thanks, Debi!

Animal Keepers' Forum publishes original papers and news items of interest to the animal keeping profession. Non-members are welcome to submit articles for consideration. Articles should be typed or hand-printed and double-spaced. Authors are encouraged to submit their manuscripts on a disk as well as in hard copy form. Manuscripts submitted either on disk or electronically as attachments to an email should be submitted in Microsoft WORD. All illustrations, graphs, charts and tables should be clearly marked, in final form and should fit in a page size **no greater than** 5.5" x 8.5" (14cm x 22cm). Literature used should be cited in the text (Brown, 1986) and alphabetically in the final bibliography. Avoid footnotes. Include scientific name (as per ISIS) the first time an animal name is used. Thereafter use common name. Use metric system for weights and measurements (standard equivalents may be noted in parenthesis). Use the continental dating system (day-month-year). Times should be listed as per the 24-hour clock (0800, 1630 hrs. etc.). Glossy black and white **or** color prints (minimum size 3" x 5" [8cm x 14cm]) are accepted. Clearly marked captions should accompany photos. Please list photo credit on back of photo. Photographs may be submitted electronically as either JPEG or TIFF file attachments.

Articles sent to *Animal Keepers' Forum* will be reviewed by the editorial staff for publication. Articles of a research or technical nature will be submitted to one or more of the zoo professionals who serve as referees for *AKF*. No commitment is made to the author, but an effort will be made to publish articles as soon as possible. Lengthy articles may be separated into monthly installments at the discretion of the editor. The editor reserves the right to edit material without consultation unless approval is requested in writing by the author. Materials submitted will not be returned unless accompanied by a stamped, self-addressed, appropriately-sized envelope. Telephone, fax or email contributions of late-breaking news or last-minute insertions are accepted as space allows. Phone 1-800-242-4519 (US); 1-800-468-1966 (Canada); FAX (785) 273-1980; email is akfeditor@zk.kscoxmail.com<

Deadline for each regular issue is the 10th of the preceding month.
Dedicated issues may have separate deadline dates and will be noted by the editor.

Articles printed do not necessarily reflect the opinions of the *AKF* staff or the American Association of Zoo Keepers, Inc. Publication does not indicate endorsement by the Association.

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E-Mail Addresses: You may reach Barbara Manspeaker at AAZK Administrative Offices at: aazkoffice@zk.kscoxmail.com< You may reach Susan Chan and *Animal Keepers' Forum* at: akfeditor@zk.kscoxmail.com<

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BFR Website: http://aazkbfr.org

From the Executive Director

See You in Salt Lake City – 2008!

Congratulations to the Utah Chapter for their successful bid to host the 2008 AAZK National Conference. The need for Chapters to vote on the location of the 2008 conference was dictated by the cancellation of the AAZK Conference in New Orleans. A thank you goes out to all the Chapters that voted.

The vote was extremely close between the bidding Chapters. In addition to the Utah Chapter, the Philadelphia and Oklahoma City Chapters also rounded out the bidding group. Thanks to the Philadelphia and Oklahoma City Chapters for all of their hard work. The close vote tells me the membership would like to visit your facilities in the near future, and I hope these Chapters take the opportunity to bid in the future.

In an attempt to keep membership costs down, AAZK is shifting our primary means of Chapter communication to an electronic format (email). It's important that each Chapter keep their email contact address current with the Administrative Office. Even more important, the responsible party for that email contact must check the email daily, then print and distribute the information in an efficient manner.

AAZK is also beginning to utilize the Web Page (www.aazk.org) as a frequent membership communication tool. Breaking news and important information is uploaded to the landing or splash page so members should check in daily to keep current on AAZK events or interesting zoo or aquarium topics.

The events posted on the splash page are meant to provide information and provoke thought within our membership. To exchange information or voice your opinion, take your thoughts to the AAZK Discussion Forums, post a topic and start a conversation. It's just that easy.

Ed Hansen, AAZk Executive Director

Coming Events

Techniques for Butterfly Conservation and Management - 24-26 April, 2006 in Gainesville, FL. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

Second International Congress of Zookeeping (ICZ) 7-11 May 2006 in Gold Coast, Queensland, Australia. Visit website: http://www.iczoo.org< for latest information or send a blank e-mail to ICZ_News-subscribe@yahoogroups.com<

Callitrichid Behavioral Husbandry and Management Workshop - 13-14 May 2006.Hosted by the Houston Zoo and Moody Gardens, Houston and Galveston,TX This free workshop for those working with tamarins and marmosets will include formal presentations, posters, invited speakers and open discussion, covering a variety of topics such as husbandry, training, enrichment and conservation. For more information go to http://www.houstonzoo.org/Callitrichid

Tenth Elephant Ultrasound and Veterinary Procedures Workshop - 17-20 May, 2006 at Riddle's Elephant and Wildlife Sanctuary, Greenbriar, AR.For more information, or to request a registration packet, please see www.elephantsanctuary.org<

Third Protected Contact Training and Enrichment Workshop - 24-28 May 2006. Hosted by Zoo Atlanta, Atlanta, GA. Presented by Active Environments. Registration is limited to 25 participants. For further information contact: Active Environments, Inc., Tel: 805-737-3700; Fax - 805-737-3705; email - active_environs@ix.netcom.com<

2006 International Gorilla Workshop - 23-26 June 2006 at Paignton Zoo, Devon, England. Paignton Zoo will be host. We would like to invite gorilla workers from all diciplines to register. Further information available at http://www.paigntonzoo.org.uk/gorillas/gorillaworkshop.htm

AZAD Regional Conference #1 - 21-23 July, 2006 at Columbus Zoo & Aquarium, Powell,OH. Annual delegate meeting on 20 July. Conference capacity if 300 people. For info contact Joyce Talkowski, Co-chair, ohioregional@abc.net, or:Jim Bartos, Co-chair, jbartazad@columbus.rr.com

Association of Avian Veterinarians - 6-10 August 2006 in San Antonio, TX. For information please visit www.conferenceoffice.com/aav or you can email aav@conferenceoffice.com; phone (303) 756-8380

AZAD Regional Conference # 2 - 15-17 September 2006 at Arizona-Sonora Desert Museum, Tucson, AZ. Conference capacity is 200 people. For info contact Marge Drugay, mdrugay@msn.com

33rd AAZK National Conference – 15-20 September 2006. Hosted by the Lincoln Park Zoo AAZK Chapter and the Lincoln Park Zoo, Chicago, IL. See information at their website www.aazk2006.org<

Animal Training Seminar - 18-22 September, 2006 at Shedd Aquarium, Chicago, IL. Five-day seminar on training techniques with Ken Ramirez. For more info and questions, contact Renee Birk at rbirk@sheddaquarium.org or call (312) 692-3328.

AAZV Annual Conference 20-24 September 2006 in Tampa, FL. For further informatin please visit http://www.aazv.org

AZA Annual Conference - 25-30 September 2006. Hosted by Busch Gardens, Florida Aquarium, & Lowry Park Zoo, Tampa, FL. See information at their website http://www.aza.org/ConfWork/AboutAnnualConf/#fut

Managing Animal Enrichment and Training - 7-13 October, 2006 in Portland, OR. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

27th Elephant Managers Association Conference - 15-18 October 2006,in Albuquerque, NM. Hosted by the Albuquerque Biological Park. Pre-conference trips are to the International Balloon Fiesta, 14-15 Oct; post-conference trip to Santa Fe and up the tram to the crest of the Sandia Mountains. For more information see www.elephant-managers.com , or call Lynn Tupa at 505-764-6216 or Gwen Dragoo at 505-764-6264.

Zoos and Aquariums Committing to Conservation - 26-31 January 2007 – Hosted by the Houston Zoo, Houston, TX. ZACC is a bi-annual event that promotes the role of zoos and aquariums in supporting conservation activities worldwide, both at their institutions and in the field. Conference participants include representatives from zoological institutions, international conservation organizations, local non-governmental organizations, government agencies, funding agencies and, most importantly, field biologists and conservationists. Bringing together individuals from different countries and disciplines, ZACC conferences help to build a stronger and more effective global network for wildlife and habitat conservation, and to establish direct links to zoos, aquariums, and their constituencies. For more information you may contact zacc@houstonzoo.org or phone 713-533-6745.

International Conference on Environmental Enrichment - 5-10 August 2007. Hosted by Schönbrunn Zoo, Vienna, Austria.

Post Your Coming Events Here
email to: akfeditor@zk.kscoxmail.com

AAZK Announces New Members

Scott Jervas, **The Berkshire Museum (MA)**; David Caron, **Zoo New England (MA)**; Marty Dearie, **Franklin Park Zoo (MA)**; Kelly Carman, **Queens Zoo (NY)**; Brandi Luther, **Catoctin Wildlife Preserve & Zoo (MD)**; Megan M. Dunn and Krystal Swatzwelder, **Maryland Zoo in Baltimore (MD)**; Sharon Kitchin, **Brandywine Zoo (DE)**; Teresa Anderson, Eric Smith,Laurel Sand, Margit Vogrinec, and Carla Estocsin, **National Zoological Park (DC)**; John C. Barcza, **North Carolina Zoo (NC)**; Gerry Braatz, **Santa Fe Community College Teaching Zoo (FL)**; Megan Kirchner, Nathan Stentiford, and Sandra Erickson, **Palm Beach Zoo at Dreher Park (FL)**; Megan Derousie, **no zoo listed (FL)**; George Middleton, **Disney's Animal Kingdom (FL)**; Kathryn Clifton and Katie Gut, **Toledo Zoo (OH)**; Raymond Hren, **no zoo listed (WI)**; Elizabeth H. Zuhse and Tiffany Pierce, **Racine Zoo (WI)**; Allison Jahn and Scott Voss, **Great Plains Zoo & Delbridge Museum of Natural History (SD)**; Caroline Novosel, **Brookfield Zoo (IL)**; Rebecca I. Prewitt, **Kansas City Zoo (MO)**; Kit Butler, **Topeka Zoo (KS)**; Brent Nelson, **Riverside Zoo (NE)**; Jonathan Reding, **Oklahoma City Zoo (OK)**; Brienne L. Grayson, **Tulsa Zoo & Living Museum (OK)**; Heather Green, **The Aquarium at Moody Gardens (TX)**; Travis Thomas, **no zoo listed (TX)**; Magdalena Dover, **Pueblo Zoo (CO)**; Jessica MacDonald, **Cheyenne Mountain Zoo (CO)**; Maria A. Kozma, **Utah's Hogle Zoo (UY)**; Amy Evans, **no zoo listed (AZ)**; Scott Brewer, **no zoo listed (AZ)**; Kate Steinbeck, **Charles Paddock Zoo (CA)**; Kathy Hobson, Jim Nappi, Julie McGilvray, Irene Donovan-Marten, Linda Holman, Jenn Giannoulis, Chris Willers, Eva Mac, Quinn Brown, Anthony Brown, Jessie Bushell, N. Rumsey, Kelly Gomez and Sara McLalan, **San Francisco Zoo (CA)**.

New Contributing Members
Douglas Griffin
Gainesville, FL

Renewing Contributing Members
Bonnie Jacobs, Keeper
Lincoln Park Zoo, Chicago, IL

Renewing Institutional Members

Taronga Zoo Education Centre
Mosman, Australia
Guy Cooper, Director

Chester Zoo
Chester, United Kingdom
Gordon McGregor Reid, Director

Lion Country Safari, Inc.
Loxahatchee, FL
Harold Kramer, General Manager

Brookfield Zoo
Chicago, IL
Dr. Stuart D. Strahl, Director

BREC's Baton Rouge Zoo
Baker, LA
Phil Frost, Director

Wildlife World Zoo
Litchfield, AZ
Mickey Ollson, Director

SPSNQ
Jardin Zoologiqué du Quebec
Charlesbourg,Quebec, Canada
Andre Martel , Director

AAZK Award Nominations Are Now Being Accepted for 2006

The AAZK Awards Committee is accepting nominations for the **Mazuri Animal Nutrition Award (MANA)**. AAZK awards will be presented at the 2006AAZK Conference in Chicago, IL. The deadline for all award nominations is **1 June 2006**. Information on AAZK's other awards appeared in the February and March 2006 issues of *AKF*. Information concerning the qualifications, nomination procedure, selection procedure and an explanation of the awards may be obtained by contacting Janet McCoy, Chair, AAZK Awards Committee, Oregon Zoo, 4001 S.W. Canyon Rd., Portland, OR 97221; email - mccoyj@metro.dst.or.us

The American Assocition of Zoo Keepers, Inc. (AAZK) is the administering organization of the Mazuri Animal Nutrition Award (MANA) presented by the AAZK Awards Committee. The purpose of this award is to recognize individuals in the zoological community who have been actively involved in projects/studies/research concerning zoo/aquarium nutrition. The award will carry a cash award of $500.00 funded by the Mazuri® Foods Division.

The character of the award includes a certificate, letter of notification to the institution's director, and national recognition by professional journals. Such journals include: the American Zoo and Aquarium Association (AZA) and the Canadian Association of Zoological Parks and Aquarium (CAZPA) newsletters; *Animal Keepers' Forum* (AAZK, Inc.); Awards, Honors and Prizes, Volume 1; United States and Canada. The latter is published by Gale Research Company based in Wheaton, MD and is found in medium to large-sized libraries across the U.S. and Canada.

The MANA was established in 2005. Mazuri proposed the award to the AAZK Board of Directors. Bruce Elkins, Curator of Waters at the Indianapolis Zoo, and Heidi Bissel, nutritionist at the Memphis Zoo, assisted in the development of the judging criteria for this award. The award is presented at the annual AAZK National Conference.

Qualifications:

1. The nominee **must** be a full-time keeper/aquarist in any North American zoological institution or aquarium who has been actively involved in projects/studies/research concerning zoo/aquarium nutrition.
2. The award candidate shall be a professional member of AAZK.
3. Supporting nominations may be submitted by management personnel from the same institution.

Nomination Procedure:

1. List name, position, institution's name, address, phone and Director.
2. List and **document** keeper/aquarist project initiation and design, research, project involvement, and usage of new nutritional information. Verification of these facts must be signed by the zoo director, curator, or immediate supervisor of the individual being nominated.
3. The deadline for nomination is JUNE lst of each year.

Selection Procedure:

The Awards Committee, consisting of five keepers, will independently review each nominee.

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People Skills for Animal People

By Jolene Hamrick
AKF Associate Editor
Tucson, AZ

Understanding Diversity in Personality and Work Styles - *Part II*

I hope over the last two months that you took at least a little time to multi-task, and as you were traveling from one exhibit to another you thought about the personality characteristics of that co-worker that drives you crazy. Maybe you gave a little more analysis to both his/her behavior as well as your own, and you're a little more willing to give him/her the benefit of the doubt.

In February's column, we listed several neutral personality characteristics and the potential judgmental interpretation that could be associated with it. In this issue we'll do a little more detailed profiling. Based on a personality profile model taught by Julie Kembel of Northwest Learning Associates (2005) in her *Introduction to Communication* course which outlines four basic personality styles, I developed stereotypical keeper characteristics for each style. As mentioned previously, there are numerous profiling models out there and each has its own slant. For this model the four general personality types include: the analytical thinker, the detail-oriented individual, the emotional social type and finally the risk-taker dreamer. The following is my interpretation of how each one of these personalities might show up in an animal keeper as well as some of the strengths and potential weaknesses of each style.

Analytical Thinker

The analytical thinker is very science-brained, interested in research, using methodical processes when observing behavior and constructing ethograms, tracking animal input and output, and monitoring the effects of an enrichment item. They like disappearing for hours at a time to be left to their own devices, not bothered by the public or other co-workers. When it comes to training a behavior, they probably do well at breaking it down into smaller pieces and enjoy working out the puzzle as they encounter challenges. Desiring to validate and verify before making decisions, they may often appear to be unproductive or disorganized. They can appear to be very cold and unemotional regarding either the animals they care for or the people with whom they work.

Detail-oriented Individual

This individual is very organized and detail-oriented, obsessing to make sure that every last spec of dirt or straw of hay is removed before adding new bedding or food into an off-exhibit holding area. They like having routine in their day and often get frustrated or thrown off course when something puts a kink in their ritual, thereby losing control. They do well with documenting on their keeper reports and keeping track of paperwork such as enrichment or training logs. They like working with checklists and ticking each item off as they get them done. Very focused on detail, they often have a difficult time with the big picture. Priorities sometimes get out of alignment.

Emotional Social Individual

The emotional social type loves to interact with the public. They do very well in a team environment, always trying to make sure that everyone is happy and getting a little nervous at the first sign of any conflict. They enjoy working with interns, docents, or on activities where they get to teach the public about all that goes on at the zoo. These individuals often appear to do more socializing than

actual hard labor. They are quick to get their feelings hurt and sometimes are a little melodramatic. They may be looked at as a gossip or one who is always meddling in people issues.

Risk-taker Creative Dreamer

This personality style loves the thrill of hands-on animal captures, creating innovative enrichment items, training techniques, or giving input on exhibit design. They are dynamic and come up with grand plans but don't always stick around long enough to complete them. They tend to think outside the box, coming up with solutions to animal problems that first seem wacky but, with a closer look, are actually pretty ingenious. Sometimes their creativity shows itself in a way that is not directly related to animal husbandry. This may mean designing educational graphics or contributing to zoo-related events such as Halloween or winter light displays. This could also be designing animal artwork that goes to auction to benefit the Zoological Society, on the cover of the *AKF*, or the latest Bowling for Rhinos t-shirt. Because they are so creative they appear to be scattered, and their need for excitement may be seen as a lack of common sense or irresponsibility.

As you read through these personality styles you may see elements of multiple styles in one individual. This is not uncommon and of course will vary depending on what model you decide to use. Regardless of the model used, the point here is to see that for every personality characteristic there is a strength and a weakness. This will become clear only when you define the characteristic in a neutral manner.

For example, when we label someone as lazy, we are making a judgment based on our perception of their behavior. It is difficult to find the strength in this characteristic because it is not neutral. You must first go back to the neutral trait to determine what is causing the behavior that you perceive as lazy.

Analytical Thinker :	Weighing all the options before taking action thereby being inactive
Detail-oriented Individual:	So focused on one detail that other things are being neglected
Emotional Social Individual:	Feeding the need to socialize and hard labor is not getting accomplished
Risk-taker Creative Dreamer:	Dréaming up wild and creative innovations for others to implement

As you can see each style has a characteristic that could lead them to be labeled as lazy but all have a very different root cause. Once you are able to determine that cause you have gained the insight that allows you to do the following if you so choose:

1) As a co-worker, you may become a little more objective, set aside judgments, and begin to appreciate your fellow employees for what they can bring to the team and/or the organization. If nothing else, this can help to alleviate some of your frustrations and reduce your stress level.
2) As a co-worker, you can be purposeful in your communications with your fellow employees, altering your communication style based on the style of your co-worker. Your flexibility will enhance your ability to get what you want from a situation and can benefit the animal, the work team, and the organization.
3) As a lead keeper or manager, you understand and recognize how to assign work and form teams based on personality strengths and weakness, thereby maximizing the team's or organization's efficiency.

Hopefully, now that you see the value in understanding the root causes of behaviors in your co-workers, you are ready to understand how to maximize your interactions with them. In June's issue of *AKF* we will wrap up this discussion talking about what communication approaches might work well with the different personality styles.

REACTIONS

A Question and Answer Forum for the Zoo Professional on Crisis Management

By William K. Baker, Jr., Curator
Panthera Research, Maumelle, AR

Question
Do master plans play a part in facility safety? Part I

Comments
Masterplans are the single best method for developing a safer facility. In the truest sense, they provide an opportunity to insure a better facility at the earliest point of development, the design phase. Like exhibit design, it is always beneficial to address concerns during development rather than during construction. Conversely, it is important to take a timely approach to masterplan development, rather than rushing the process to facilitate donor and corporate sponsorship. Incurring a mistake in a masterplan can easily magnify problems across a facility. In addition, flaws are costly to address even during the design phase when the prints have to be redrawn. It is important to note that the better design companies charge accordingly and often by the hour, and the resulting invoice can be substantial.

Design Safety:

- Fence perimeters should have a substantial 8-foot (minimum height, not chain link) fence, with a top that discourages individuals from climbing over. This can be done with tasteful architecture.
- Insure exit gates can be opened wide in the event of a rapid evacuation. Consider installing extra-wide gates, which are normally closed, but which can be completely opened to allow large crowds to pass thru quickly in the event of an emergency. Be sure they open toward the outside of the perimeter to provide a better flow of distribution for the exiting crowd.
- Utilize architectural techniques to break up and channel crowds to exits and parking areas. You should have at least two, wide avenue exit routes from your property, opening on different sides of the perimeter. One is for emergencies only.
- Turnstiles are strongly discouraged as they prevent rapid evacuation of visitors.
- Sidewalks should not only be designed with ADA objectives in mind, but large groups of two-way traffic such as school groups. Wider sidewalks promote better traffic flow in evacuations and provide direct access to event sites during crisis management situations.
- Public parking lots should be restricted to a distant location if possible, to avoid direct access within 300 feet of an occupied staff building or complex area to promote increased security.
- Public parking lots should be capable of facilitating entry and exit from different points. Also, always make a provision for bus parking adjacent to the main parking lot.
- Staff members should be provided with a secure parking area located within the perimeter that requires coded access and has minimal gate access.
- Minimize gates in back lots and remote areas. Use good tamper-resistant locks.
- Is the facility developed for keeper, service vehicle, and heavy equipment access? In other words, will the designer provide for long-term access to the exhibits themselves;

otherwise the staff will have serious problems getting into the exhibit areas for landscaping and repairs.

- Exhibit designers seem to have real problems understanding drainage surrounding an exhibit. All too often the exhibit is flooded from the public areas during heavy rains. Always direct water flow away from the exhibit into storm drains and, if at all possible, put the exhibit on slightly higher ground. Conversely, sidewalks should have adequate slope towards the storm drains as well.
- Staff complexes and office buildings should be located away from the public entry points of the Zoo. All too often I hear about protestors or problem visitors who paid at the ticket booth and in turn walked right into the Administration building adjacent to the main gate.
- Landscaping should be used tastefully, but not to the point of encroaching into public areas or preventing inspection of perimeter fences, entry points, and shouldn't interfere with traffic flow.

Design Security:

- Lighting at night along the perimeter should be the strongest, followed by entry points into the facilities and the animal service areas. Perimeter lighting is a key issue in reducing after-hours intrusions.
- Ideally, all exhibits should have the ability to be lit in an emergency as well. If an animal exhibit is expansive there should be enough security lights to enable the staff to see the entire yard at a glance, especially in an emergency.
- Solar power should be considered a viable alternative for lighting public and staff work areas, as well as maintaining hot-wire systems for animal exhibits.
- Develop alternate forms of electrical and water supply for emergency operations. Consider purchasing a stand-by generator to maintain vital services.
- While landscaping is a key component of the natural look of a zoological facility, it should not interfere with security measures and provide potential hiding places.
- Has any thought been given to night security? Provisions should be made for adequate direct lighting and accent lighting in public areas when the need arises for nighttime special events.
- Automated alarm systems can be effective when equipped with an alternate power source in the event electrical service is interrupted or fails. Monitored systems are best.
- Secondary guardrails should be strong enough to prevent trespass and distant from the primary containment caging. "Danger rails" can still be found in some zoos that have high volume traffic or consistent public problems. Holly bushes, palmettos, and cactus are nature's version of razor wire and do a wonderful job of keeping the public where they belong - behind the guardrail.
- Consider primary containment of the exhibits as well, which by design lends itself more towards preventing animal escape, rather than prevention of human entry or intentional releases.
- Areas that restrict public and staff access should be clearly marked with the appropriate graphics to indicate the level of access. Good graphics are a must.
- Consider the use of burglar bars and directed security lighting near any administrative, laboratory, research, or veterinary service buildings. They should be considered high-profile targets.
- Contractor access should be controlled and monitored through manned access gates.
- After-hours access to a facility should be rigidly controlled. There should be a provision for sign-in/sign-out procedures with visual confirmation by the night staff. A basic guard shack at a entry gate can address most security-related entry concerns.

- Finally, has thought been giving to crisis management? The following equipment should be factored into all building designs: Fire extinguisher systems (halon or water), smoke detectors, and carbon monoxide detectors.
- Back-up emergency lighting should also be considered a must have item inside of buildings.

A few final thoughts on this section. Always carefully consider the locations of your visitor service points to assist members of the public during their visit. It does little good to have only one point of service at the far end of the park. You may note that most large theme parks have this down to a science and provide multiple information and assistance points throughout their parks. The same can be said for first aid stations, which should be strategically located at key points throughout a park.

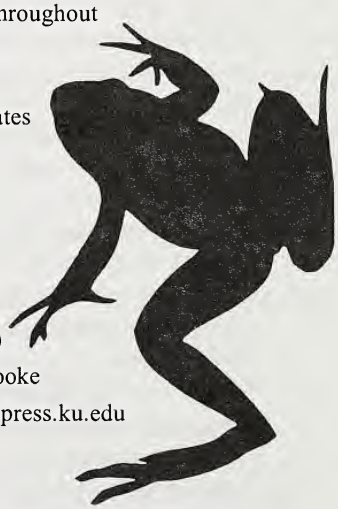
Next Month: Do master plans play a part in facility safety? Part II

If you would like to submit a question for this column or have comments on previously published materials, please send them to AAZK, Inc., 3601 S.W. 29th St., Suite 133, Topeka, KS 66614 Attn: Reactions/AKF

(About the Author: Since 1985 Bill has been active in the fields of science, zoology, and wildlife management. His education and experience include a B.S. in wildlife management and post-graduate studies in zoology, Lab and Museum Assistant, Shoot Team Leader, ERT Member, Large Mammal Keeper, Senior Keeper, and Zoo Curator at various zoological facilities. His area of research is crisis management in zoological institutions, which draws upon practical experience and training as a Rescue Diver, Hunter Safety Instructor, NRA Firearms Instructor, and Red Cross CPR/First Aid Instructor. Away from work he operates Panthera Research, which is a research and consulting firm.)

NORTH AMERICAN HERP KEY BACK IN PRINT

The widely-acclaimed laboratory guide, *A Key to Amphibians and Reptiles of the Continental United States and Canada* by Robert Powell, Joseph T. Collins and Errol D. Hooper, Jr. is back in print. Originally published by the University Press of Kansas in 1998, the Press is pleased to announce that an unprecedented fourth printing has just been received from the printer and is once again available for use in college and university herpetology courses throughout Canada and the United States.



A Key to Amphibians and Reptiles of the Continental United States and Canada, 1998
vi + 131 pages, 257 figures, paperback
ISBN 0-7006-0929-6
Price: $17.95 US

To order this title from the University Press of Kansas, call (785) 864-4155; or order from University Press of Kansas, 2502 Westbrooke Circle, Lawrence, KS 66045-4444, USA; website at www.kansaspress.ku.edu

What is a Duck DERP????

By Steve Sarro
Anseriform Taxon Advisory Group
Salisbury Zoological Park, Salisbury, MD

What is a DERP, you may ask?

DERP is a population management category just like SSP, PMP, Phase-In, Phase-out and In-Situ. DERP is an anagram for Display (on public display), Education (in education programs), Rehabilitation (non-releasable animals injured in the wild) or Research Purposes (for specific conservation-oriented research programs). DERPs are species that need some population size management but not the intensive effort as an SSP or PMP species. In many zoos and aquariums, waterfowl are displayed in mixed species exhibits to add character and interest. Generally, the waterfowl are not the focal point of the exhibit. Over the years, the captive waterfowl population and its diversity in the United States has declined as many facilities emphasize other species and do not breed their waterfowl. Consequently, many once common species such as the African Yellowbill Duck and Gadwall are now uncommon. DERP waterfowl must be managed demographically to preserve these species for our future generations.

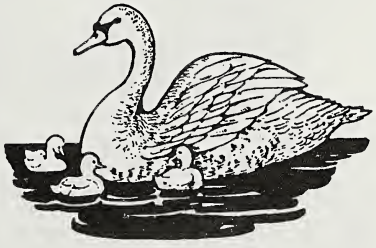
So, what is the Anseriform TAG doing to address this issue? The decision was made by the Steering Committee to seek "Champions" for the DERPs. While SSPs and PMPs generally manage one species, the management of the DERPs will be multi-species in scope. Each DERP grouping consists of 10 - 16 species and is called a "Raft." The manager is the "Raft Champion". The Raft Champion's duties include monitoring their raft's populations, being the "go-to" person for facilities interested in information on that species and submitting a report to the Anseriform TAG Chair by 15 January of each year. The report will cover basic demographic information such as hatchings and deaths. The Rafts are as follows:

Raft #1 *(13 species)*

White-faced Whistling duck
Fulvous Whistling Duck
Lesser Whistling Duck
Black-necked Swan
Freckled Duck
Gambian Spur-winged Goose
Old World Comb Duck
Black-bellied Whistling Duck
Plumed Whistling Duck
Black Swan
Cape Barren's Goose
Spur-winged Goose
Black Spur-winged Goose

Raft #2 *(10 species)*

Magpie Goose
Bar-headed Goose
Emperor Goose
Ross's Goose
Barnacle Goose
Domestic Goose
Lesser White-fronted Goose
Lesser Snow Goose
Aleutian Canada Goose
Red-breasted Goose



Raft #3 *(13 species)*

Ringed Teal
Cape Teal
Chiloe Wigeon
American Black Duck
African Yellow-billed Duck
Cinnamon Teal
Northern Cinnamon Teal
Bronze-winged Duck
Falcated Teal
American Wigeon
Layson Teal
Blue-winged Teal
Andean Cinnamon Teal

Raft #4 *(14 species)*

Red Shoveler
Northern Shoveler
Northern Pintail
Bahama Pintail
Sharp-winged Teal
Green-winged Teal
Hottentot Teal
New Zealand Shoveler
Chestnut Teal
South Georgia Pintail
Red-billed Pintail
Baikal Teal
Silver Teal
Puna Teal

Raft #5 *(14 species)*

Western Hartlaub's Duck
Australian Wood Duck
Abyssinian Blue-winged Goose
Orinoco Goose
Ruddy-headed Goose
Moluccan Radjah Shelduck
South African Shelduck
Mandarin duck
Brazilian Teal
Egyptian Goose
Ashy-headed Goose
Common Shelduck
Ruddy Shelduck
Paradise Shelduck

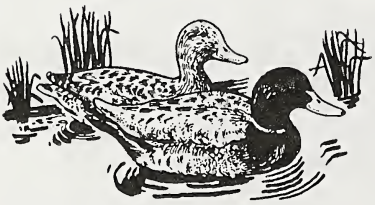
Raft #6 *(16 species)*

Bufflehead
American Goldeneye
Smew
American Merganser
Red-crested Pochard
Canvasback
Lesser Scaup
Spectacled Eider
Common Goldeneye
Barrow's Goldeneye
Hooded Merganser
North American Ruddy Duck
Rosybill Pochard
Common White-eye
American Eider
King Eider

The Raft Champion is a very important position. The Raft Champion will have direct input in helping to manage species in the Anseriform TAG's Regional Collection Plan into the future and to assure our collections will have the species needed for new exhibits. If you are interested in applying for a Raft Champion position, please send a letter of intent and a letter of support from your director to either:

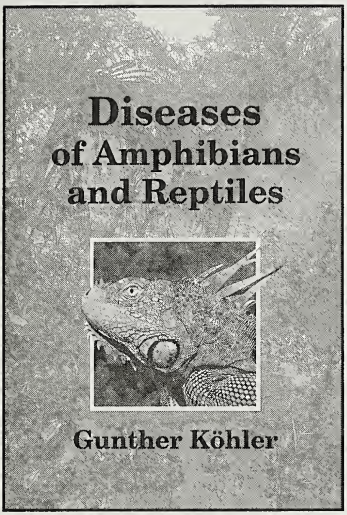
Steven J. Sarro
Salisbury Zoo
755 South Park Drive
P.O. Box 2979
Salisbury, MD 21802
410 548-3117 office

Jackie Peeler
Henson Robinson Zoo
1100 E. Lake Drive
Springfield, IL 62712
(217) 753-6217 ext-23



We look forward to building an energized Duck DERP Team of Raft Champions. If more than one person applies for a Raft Champion position for a specific group, the Anseriform TAG Steering Committee will vote on those candidates and choose one. The deadline for applications is 1 August of 2006. Join us.

NOW AVAILABLE

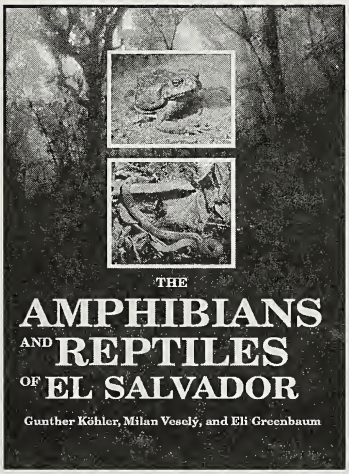


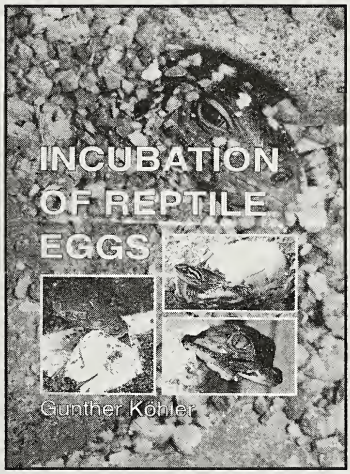
Diseases of Amphibians and Reptiles

by Gunther Köhler
Translated by Valerie Haecky
English Ed. 2006 ..... 184 pp.
ISBN 1-57524-255-9 ..... $37.50

Dr. Köhler presents clear, basic information on how to care for amphibians and reptiles, and he draws extensively on his experience as a veterinarian. He describes general diagnostic techniques—parasitological, bacteriological, mycological, and virological—as well as x-ray, ultrasonics and endoscopy. There is a section on proper care and housing for these animals, and the author stresses the importance of providing the right conditions for them, which will contribute greatly toward keeping them healthy. Dr. Köhler also supplies detailed descriptions of the major diseases that affect these animals, making diagnosis and decisions about the correct therapy easier. Tips on how to handle emergencies and give first aid are also provided. The book is a valuable guide for both veterinarians and hobbyists. Includes 133 Color Photographs, 58 Black/White Photographs and Illustrations.

Other titles by Dr. Gunther Köhler





The Amphibians and Reptiles of El Salvador

by Gunther Köhler, Milan Veselý, & Eli Greenbaum
Orig. Ed. 2006 248 pp.
ISBN 1-57524-252-4 $49.50

Incubation of Reptile Eggs

by Gunther Köhler
Translated by Valerie Haecky
English Ed. 2005 214 pp.
ISBN 1-57524-193-5 $38.50

To place your order and obtain shipping costs call 1-800-724-0025 or e-mail us at: info@krieger-publishing.com

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Research Collaborative for Conservation: Zoos and Universities Working Together

Engaging and Empowering Local Communities in Conservation

(Report on a presentation by Dr. Daniel Rubenstein of Princeton University at the AAAS Annual Meeting, Saint Louis, MO)

submitted by Linda Reifschneider
Saint Louis Zoo and Earthwatch Volunteer

AAAS Annual Meeting, St. Louis, Missouri, 17 February 2006 - The Grevy's zebra (*Equus grevyi*) is one of the most endangered members of the horse family in the world. Dr. Daniel Rubenstein of Princeton University reported at the annual meeting of the American Association for the Advancement of Science (AAAS) that population numbers for Grevy's in their home range of Kenya and Ethiopia have plummeted from 15,000 to 2,000 animals. More than 70% of these live in the Samburu region of northern Kenya, most of them on unprotected community lands. Now an innovative partnership between Princeton University and the Saint Louis Zoo's WildCare Institute is bringing effective conservation of Grevy's zebras within reach for Samburu pastoral cooperatives.

Dr. Rubenstein reported that the increase in the number of plains zebras (*Equus burchelli*), which are not endangered, impacts on the Grevy's while the presence of Grevy's has no negative impact on plains zebras. Parasitism is not an issue as there is less found in Grevy's than plains zebras. Thus the decrease in number of Grevy's zebras cannot be attributed to disease or poor condition from parasite infestation.

To find out how livestock impact Grevy's populations in the historical central part of their range, WildCare Institute, in collaboration with Lewa Wildlife Conservancy and the Northern Rangeland Trust, employed local scouts from pastoral communities in northern Kenya to gather data on the activities of zebras relative to livestock. One man and two women in each of six districts were given training in the use of GPS systems and notebooks to record weather, landscape, other animals, which Grevy's were present (males, lactating females, non-lactating females, etc.), and what they were doing. The scouts were employed 100 days a year and the male scouts worked more in the open areas while the women worked more enclosed areas.

Communications were in three languages: Samburu, Swahili and English. When female scouts remained quiet at the first meetings held to go over field results, separate meetings for the male and female scouts were initiated. As a result, the women spoke of their experiences and what they saw quite freely. After the first year, the results of their data found that only about 35% of their sightings of Grevy's zebras were in the presence of livestock, and for non-lactating females the percentage was even lower. This suggested that the Grevy's were relegated to suboptimal habitat, a potentially harmful situation for female zebras attempting to regain body condition after weaning their young. "The people heard our message," commented Dr. Rubenstein, "as one year later more Grevy's were walking with the livestock and, when asked about this change, 'we quit throwing rocks at them' was the reply". By allowing the Grevy's to drink during the day with the livestock, the zebras were subject to less risk of predation than when they had been kept away from the water during the day and had to wait until nightfall to drink.

Since 2001, Earthwatch® volunteers working at the Lewa Wildlife Conservancy have been instrumental in helping us show that part of the reason that Grevy's zebras fare poorly even in the best of conditions is related to competition with plains zebras," said Rubenstein. "Their data also showed that Grevy's zebras prefer to drink during the morning, highlighting the problem of co-existing with herds of livestock outside the conservancy that occupy waterholes during the daylight

hours. By having to wait until dusk to drink, Grevy's zebras face elevated risks of predation." Earthwatch® is celebrating its 35th anniversary of putting researchers in the field, helping to keep them there via funding and volunteer support as well as a long tradition of putting zookeepers in the field.

In March, two zookeepers from Saint Louis, two from San Diego Zoo and one from Minnesota Zoological Park added their special expertise to the Grevy's Zebras project. They will be able to share first-hand knowledge of Grevy's zebra behavior and habitat needs in the wild.

Part of WildCare Institute's involvement in Samburu is helping to develop a teacher training program to introduce ecological and conservation thinking into local schools. Therefore, learning about the Grevy's zebra and conservation issues can be a year-round effort rather than simply the workshops held once or twice a year. And this year, the Saint Louis Zoo is recruiting a team of interested volunteers to participate in Earthwatch's Grevy's Zebras project in September. The Earthwatch® project began in 2001 and Dr. Rubenstein advised that "Much of my data comes from my working with Earthwatch® teams."

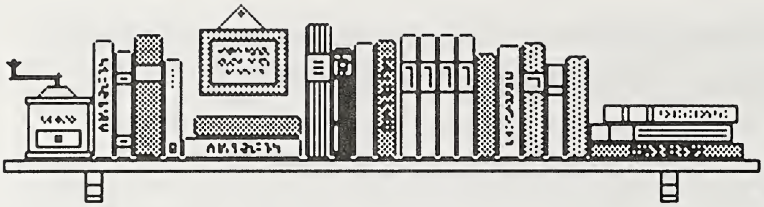
Dr. Rubenstein is chair of the Department of Ecology and Evolutionary Biology and Director of the Program in African Studies at Princeton University, as well as a Board member and principal investigator for Earthwatch® Institute.

To learn more about Earthwatch's Grevy's Zebras project, go to www.earthwatch.org/conservation/samburu.html

To join Saint Louis Zoo's special September Grevy's Zebras team, go to http://www.stlzoo.org/education/zootravelprogram/kenyaearthwatchtrip906.htm

For more information about WildCare Institute's Grevy's zebras program: http://www.stlzoo.org/wildcareinstitute/grevyszebrasinthehornofafr/conservingthegrevyszebrasin/.

(Photo courtesy of Saint Louis Zoo)



Book Reviews

Jambi and the Lions
Written and illustrated by Jennifer Brady
©1992 by Jennifer Brady ISBN# 0-933849-41-9 (LIB.BDG.)
Landmark Editions, Inc., P.O. Box 4469, 1402 Kansas Ave.,Kansas City, MO 64127
Hardback, 29 pgs., Price $15.95

Review by Alicia Shelley, Zookeeper IV
Columbus Zoo and Aquarium, Powell, OH

Jambi and the Lions was written and illustrated by 17-year-old Jennifer Brady. She won an award for her book through Landmark Editions. It is written in a format for young readers, but the story is enjoyable for older children and adults as well!

It grabs your attention right from the start as the cover shows Jambi running with a pride of lions. The story itself takes place on the savannahs of Kenya. It takes you on a journey through the eyes of a young boy who is fascinated with lions. This fascination stems from the author herself as she is very concerned about the conservation of these animals.

Jambi watches the pride of lions daily, as they watch him. He considers them a part of his family. When they are in danger, he is determined to help them despite objections from his father and without concern for his own well-being. The illustrations are beautiful and truly capture the story as well as reflect the author's love of these animals.

Will Jambi be able to save the lions? Find out for yourself!

Frogs: Inside Their Remarkable World
By Ellin Beltz; September 2005
Firefly Books Ltd., 66 Leek Crescent, Richmond Hill, Ontario, Canada, L4B 1H1
ISBN: 1-55297-869-9
Hardcover 176 pages, 8 1/2 x 11, 125 color photographs, maps, bibliography, glossary, index
Price: $34.95 Available through better bookstores and online booksellers

Anyone who has heard a chorus of deep croaks emanating from a muddy pond on a hot day can hardly help think of frogs as an ultimate symbol of summer in the country - or, for that matter, the suburbs. But aside from the casual elementary school introduction to tadpoles, most people know little about these ubiquitous creatures. That there is a great deal to know will be no surprise. That the unfolding of the information is absolutely fascinating, even to the non-naturalist, is less expected.

Such is the subtle lure of *Frogs: Inside Their Remarkable World*, a book that seduces the reader with intriguing textual detail and marvelous up-close photography. Frogs (which includes toads) live virtually everywhere on earth except Antarctica. There is a frog that lives north of the Arctic Circle, hibernating through the winter by changing its body fluids to a form of antifreeze. Others live at the tips of South America and Africa. Frogs thrive in fresh-water ponds and salt-water swamps, in fast-running water, in mountains and in hot deserts. They live in trees (thanks to adhesive disks at the end of their fingers) and underground. They are found at sea level and, in the Himalayas, at 17,000 feet. The two smallest known frogs are about 3/8 of an inch long. The largest is Cameroon's Goliath Frog, which can weigh up to eight pounds and grow to almost a yard in length. There is a lungless frog that breathes through its skin, something other frogs also do to a greater or lesser extent. There is a South American frog with teeth and an African frog with claws.

This diversity is not surprising given that there are between 4,000 and 5,000 known frog species with more being discovered every year. For study purposes, frogs are divided into 31 families, and that is how they are presented in *Frogs: Inside Their Remarkable World.* After only a few pages entitled "A Brief Natural History," the reader is introduced to each of the frog families through large, detailed photographs and several paragraphs of text. One learns where the family is found (some are very specifically located, some found almost worldwide), about its distinctive physical characteristics, and about its feeding, breeding and other habits. One meets toads that excrete exceptionally poisonous venom, horned frogs that look for all the world like mini-dragons, even a glass frog, with belly skin so transparent that one can see the workings of its inner organs.

Whether by design or accident, putting all of this material first is the perfect structure for the book. By the time the reader moves on to chapters on "Anatomy & Physiology," "Environment & Adaptation," and "Frogs in Myth & Culture," these marvelously diverse creatures have already cast a spell as strong as any that ever turned fairytale prince to fairytale frog.

Speaking of frog princes, the final chapter of the book offers a perspective on the prominent place frogs have held in traditional cultures around the world. Frogs were associated with fertility, with bringing rain, and with other magical powers and influences. They were thought to be the familiars of witches, and used in potions and brews such as Shakespeare's well-known recipe with "eye of newt and toe of frog." And yes, our own culture being no exception to those that have fallen under the spell of the frog, Kermit is here, too.

Today, scientists study frogs in medical research where toad toxins led the way to development of a powerful pain killer, and frog skin has been used to treat wounds. Frogs are among the most successful adaptive animals the world has known, and there are lessons there, too. But more than this, these little creatures, in all their often marvelous ugliness, are simply among the most interesting in nature.

Amphibians & Reptiles of the Bay Islands and Cayos Cochinos, Honduras
By James R. McCranie, Larry David Wilson, and Gunther K^hler
Order online at: http://herplit.com/BayIslands/
Hardcover (ISBN: 1-932871-05-5); 224 pages, 6 x 9 inches, full color throughout
Price: $29.95 Shipping: $4.00 within the USA; $9.00 non-USA addresses

The Bay Islands and Cayos Cochinos are home to 55 amphibian and reptile species, 12 of which are endemic to these islands. Hog Island Boas occur here as well as five species of iguana (two endemic). McCranie, Wilson and K^hler are the undisputed authorities on Honduran herpetology. Their combined knowledge is pooled here for the first time and complemented with a multitude of photographs to highlight the unique herpetofauna of these islands. A scientific treatise, as well as a field guide, this book is indispensable for anyone interested in Central American amphibians and reptiles.

"At first glance, this book seems to be a field guide, and at 6 x 9 in. and just over 200 pages, full of species accounts, it looks like one, too —but this is more than a field guide . . . Between them, the authors of this book probably know more about the amphibians and reptiles of Honduras than anyone, and their expertise is evident . . . Even if you can't visit the Bay Islands, buy this book. Through its photographs, you can take a virtual trip. It will be worth it" — Arthur C. (Sandy) Echternacht review in *Iguana*.

"The authors of this authoritative book about the herpetofauna of the Honduran Bay Islands have produced much more than a simple guide. They not only illustrate and describe the 55 species of amphibians and reptiles, they provide user-friendly keys and detailed descriptions of the islands and their rapidly changing habitats. In addition, they present a thoughtful analysis of the forces, few of them positive, that affect the conservation status of the islands' unique populations of amphibians and reptiles, many of which are endemic."—Robert Powell, Avila University and Editor of *Iguana* published by the International Reptile Conservation Federation.

Legislative/Conservation Update

Compiled by Georgann Johnston
Legislative Advisor
Sacramento, CA

Chinese Wolves to Cut Blue Sheep Numbers

China's effort to protect its wild blue sheep (*Pseudois nayaur szechuanensis*) has been so successful that it now plans to employ wolves to preempt a looming population explosion. The wild blue sheep, once teetering on the brink of extinction, has lived a sheltered life at the Helan Mountain Natural Reserve in northwest China since 1988, multiplying beyond all previous forecasts, the *China Daily* reported. During their 18 years under protection at the reserve, sheep numbers have increased from 1,200 to more than 15,000, suddenly putting much of the reserve's vegetation on the endangered list, according to the paper. Within the protected confines of the natural reserve, the sheep have almost no natural enemies, but officials plan to change that with the introduction of wolves.

"We think we need to introduce wolves to help control the sheep population," said Cui Duoying, a zoologist at the Huadong Normal University in Shanghai. "The ecological equilibrium of the area has been seriously affected."

However, experts worry that the fierce carnivores, presented with an all-you-can-eat sheep menu, will themselves start to multiply out of control, presenting the area with a new population problem. *Source: Iran Daily News Online 2-23-06*

Malaysian Orangutans Near Extinction

Deforestation and palm oil plantations are driving orangutans in the Malaysian part of northeastern Borneo to the verge of extinction, according to a recent study. The evidence comes from a DNA database of orangutans living in the Kinabatangan Wildlife Sanctuary in the Malaysian state of Sabah, says the study, published in PLoS Public Library of Science Biology, a US journal. By collecting feces on the ground and hair from tree nests, researchers were able to build up a genetic picture of around 200 orangutans in this community. By using this information and comparing it in a computer simulation against a stable population, they found that little more than a century ago, the Kinabatangan orangutans had a much broader genetic base, signifying that their community was far more numerous. This base started to narrow as deforestation began in the region in the 1890s. The trend accelerated in the 1950s and 1970s as the apes in the gene pool got fewer and fewer. When extrapolated for orangutans across the region, the news is grim.

"The genetic study shows that there is a high risk of extinction in Sabah in the near future if this decline goes on unabated," warned one of the authors, Marc Ancrenaz of the Kinabatangan Orangutan Conservation Project. Orangutans are the only great ape to be found outside of Africa. There are two species: *Pongo abeli*, found only in northern Sumatra, Indonesia, and *Pongo pygmaeus*, found in Borneo, an island shared by Indonesia, Malaysia and Brunei. Most of the *P. pygmaeus* orangutans are in Sabah. A figure of 27,000 for the overall two populations has been advanced, but many experts say the number is unreliable. There is unanimity, though, that both population have declined dramatically. This is especially the case among Borneo orangutans, whose numbers may have declined by as much as a third in 1996 and 1997 as a result of forest fires and drought. The Sabah apes are further at risk by managed forests and oil palm trees, which fragments their habitat, leaving the orangutans in isolated communities and unable to breed.

"This population will disappear forever if natural forests are converted to oil palm agriculture," Laurentius Ambu, deputy director of the Sabah Wildlife Department, said in a PLoS press release. "The results of our genetic study underscore the need to act now to protect the long-term survival of the species. The animals still show enough genetic diversity to stabilize, if immediate steps are taken to reconnect remnant forest patches and halt further deforestation."*Source: Iran Daily News Online 2-23-06*

Whale Song a Criteria for Mate Selection

It's long been thought that singing is used by whales to attract mates or repel rivals, but new Australian research indicates the serenades may be the basis on which the females select their sexual partners, Agence France-Press (AFP) reports. University of Queensland researchers said that they believe the male's songs are part of an elaborate courtship ritual between humpback whales (*Megaptera novaeangliae*) as they appear to be directed more toward females than to warn off rival males. "The male singers are spending a lot more time singing with the females," said researcher Joshua Smith. While he cannot say the songs attract the females, they do facilitate sex.

"Certainly there's evidence for courtship. It seems to certainly be a courtship display that facilitates mating interactions with females," he said. Smith said the characteristics of the song were possibly being used by the females to assess the singing males. "The way they structure the songs, perhaps using particular elements like higher or lower frequencies and how well they do that, could reflect attributes of that male such as his fitness, maybe his age," he said. He said the songs, made up of chirps, moans and barks, were repetitive but structured and could be detected as far as 20 kilometers away. "The singing can last from 10, 15, 20 minutes to as long as 23 hours—on average we are looking at three hours," Smith said.

Smith has worked with a team of scientists and volunteers to track whales off the eastern Australian coast for three years as the sea-dwellers migrate south from their breeding areas near the Great Barrier Reef. "We've still got such a long way to understanding the humpback whales and the social systems involved," he said. *Source: AFP 2-23-06*

Amazon Protected Zone Twice as Big as Belgium

In the "good news" department, Brazil has designated an area twice the size of Belgium as an environmentally-protected zone in its Amazon region, reports AFP. A 64,000-square-kilometer area was added with the creation of seven new conservation areas and the growth of the Amazon National Park in the northern state of Para. The zone was created after President Luiz Inacio Lula da Silva signed a decree before environmental groups. An Amazon road project provoked in some areas a "500-percent rise in deforestation, in addition to increased land occupations, the rise of assassinations of farmers, and the expulsion of indigenous populations," the government said. Last year, Lula signed a decree provisionally protecting an area of 82,000 square kilometers. *Source: Iran Daily News Online 2-23-06*

Poisioning Suspected in Elephant Deaths

Six wild Sumatran elephants (*Elephas maximus sumatranus*) found dead with blackened mouths on the jungle floor of Mahato, Riau province, on Indonesia's Sumatra island, were believed to have been poisoned, according to a World Wildlife Fund (WWF) official. "We have a strong belief that they were all poisoned," Desmarita Murni, WWF communications officer for species programs, told *Deutsche Presse-Agentur* (dpa), adding that the WWF planned to perform an autopsy to determine the exact cause of death and how and who might have poisoned the animals. Continuous conflicts between the the elephants and villagers encroaching into the jungle have often been cited as the cause of the elephants' occasional rampages that damage houses and kill villagers in some regencies in Riau province. *Source: ZooNews Digest #391 March 5, 2006*

U. S. to Study Polar Bear Habitat/Global Warming Connection

In a move hailed by environmentalists, the Bush administration announced it will review whether polar bears (*Ursus maritimus*) should be considered a threatened species given indicators that their icy habitats are melting away due to global warming. In a statement, the U.S. Fish and Wildlife Service said protection "may be warranted" under the Endangered Species Act, and began a review process to consider if the bears should be listed.

The agency will seek information about population distribution, habitat, effects of climate change on the bears and their prey, potential threats from development, contaminants and poaching during the next two months before making a decision on whether to list the bears.

The decision comes after the Center for Biological Diversity filed a petition in 2005 that said polar

bears could become extinct by the end of the century because their sea ice habitat is melting. The USFWS said that the petition "presents substantial scientific and commercial information indicating that listing the polar bear may be warranted." The group, joined by the Natural Resources Defense Council and Greenpeace, also filed a federal lawsuit in December to seek federal protections for the polar bear.

"I think it's a very important acknowledgment that global warming is transforming the Arctic and threatening polar bears with extinction," said Kassie Siegel, lead author of the center's petition. USFWS spokesman Bruce Woods said the petition "contains sufficient information to convince us that we need to do a more thorough analysis of the polar bear population worldwide."

Polar bears under U.S. jurisdiction are found only in Alaska. They spend most of their lives on sea ice, but the Center said if current rates of decline in sea ice continue, the summertime Arctic could be completely ice-free well before the end of the century. There is some disagreement about whether polar bears are actually being threatened. Federal wildlife officials report healthy populations of polar bears, and are working on a hard population count. However, the University of Colorado's National Snow and Ice Data Center, NASA and the University of Washington said last fall that there was a "stunning reduction in Arctic sea ice at the end of the northern summer."

If the polar bear were listed as a threatened species, federal regulatory agencies would be required to consider how their decisions affect polar bears. A listing could affect industries seeking permission to release greenhouse gases or decisions such as setting fuel economy standards for vehicles, Siegel said. Siegel hailed the decision as an important precedent on the science of global warming. If the polar bear ultimately is listed as threatened, it will make a strong statement that the effects of climate change are no longer uncertain.

In the United States, only Alaska has polar bears. The U.S. population is estimated at between 2,000-5,000 bears. Arctic-wide estimates are between 21,000 and 28,000 bears. *Source: MSNBC.com 2-08-06 from The Associated Press*

Gorilla Study Disproves Menopause Theory

A study of gorillas at 17 North American zoos, led by researchers from the Brookfield Zoo, is the first to document gorilla menopause. The average age of the post-menopausal gorillas was 44 years. In American women, menopause hits around age 51. Many biologists believe menopause evolved because it gave human grandmothers more time to help care for their grandchildren. The new findings argue against the so -called "grandmother hypothesis" since female gorillas in the wild migrate away from their natal groups and don't hang around to care for the grandkids. *Source: The Los Angeles Times 12-24-05*

From the Believe It or Not Department....

A Christmas Island frigate bird (*Fregata andrewsi*) named Lydia made a nonstop journey of just over 26 days and covering nearly 2,500 mils - across Indonesian volcanos and some of Asia's businest shipping lanes - in search of food for her baby. The trip, tracked with a global positioning device by scientists at Christmas Island National Park on Asutralia's Imdiamn Ocean territory, is by far the longest known nonstop journey by one of these critically endangered seabirds.

Previously, the black-and-white scavengers with distinctive pink beaks and wingspans of up to eight feet, were known to fly only a few hundred miles. See the full story at http://www.birdwatchersdigest.com/site/funbirds/birdnews/frigatebird.aspx *Source: Los Angeles Times 12-24-05*

Second Call for Papers
AAZK Chicago 2006

The City of Big Shoulders, Lincoln Park Zoo, and the LPZ AAZK Chapter are looking forward to a great conference in September 2006!

This is the second call for papers for the conference program. The conference theme is history, and preference will be given to papers that follow a theme of advances in the zoo field over the last 20-30 years, and advances in the zookeeping profession!

Please, when you submit your abstracts, include the following information:

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Abstracts for this second call for papers are due **MAY 15, 2006**. If you are presenting a poster, please indicate this in your contact info. Abstracts will need to be approved by the Nat'l AAZK Board as well, so the approval process may take a little longer than usual.

Finished papers will be due **JULY 1, 2006**, as we are making efforts to bring the whole proceedings to the conference itself. Once your abstract is accepted, we will be in contact with you to get info on other deadlines/needs for the conference.

NEW ORLEANS CONFERENCE PRESENTERS:
You DO need to resubmit your abstract to us to be considered for this conference program. We have not been forwarded any presentations or abstracts from last year's conference, so please know that you will need to re-submit these as well if your paper is accepted.

Please submit abstracts (preferably electronically) in a Word program to mbrownpalsgrove@lpzoo.org, or send to Michael Brown-Palsgrove at Lincoln Park Zoo, PO Box 14903, Chicago, IL 60614.

Any questions, please call Lisa Scanlon at 312-742-7748, or email at lscanlon@lpzoo.org

Thanks and we look forward to a great conference!

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September 15-20, 2006

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AAZK Member	$175.00 (US Currency)	_____
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Friday 15 September (Ice Breaker)	$30.00	_____
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Saturday 16 September (Papers, Breaks)	$40.00	_____
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NO refunds after 01 September 2006

Send this form and all fees to: AAZK 2006 Conference Registration, Lincoln Park Zoo, P. O. Box 14903 Chicago, IL, 60614. *Fees include a $50 Contribution to AAZK National.

Conference Notes and Updates

SPONSORS

The conference is a costly production and we would appreciate any AAZK Chapter or affiliated group that would like to sponsor us either by helping with a break, the hospitality suite or just with a donation to help cover the expenses, any and all donations would be greatly appreciated.For more information email: **aazk@lpzoo.org**

EXHIBITOR'S TABLES

There is space in our designated Exhibitor's Hall for AAZK Chapters or groups interested in selling or displaying their merchandise or causes. Cost per table will be:

$50 for AAZK Chapters.
$100 for non-profit groups such as TAGS, Conservation Groups etc.
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Please contact Marie Perez at **mperez@lpzoo.org** or at 312-742-2140

PRE/POST CONFERENCE TRIPS

Our post-conference trip will take us to Peoria, IL-151 miles southwest of Chicago. This will be an overnite adventure (20th & 21st Sept.) featuring the Wildlife Prairie State Park & the Glen Oak Zoo. At the Wildlife Prairie State Park, you can discover the animals that called Illinois home during the pioneer days. This unique 2,000-acre zoological park is home to wolves, bison, waterfowl, black bear, elk, cougar, otter and much more. We'll spend a night on the prairie & then check out Glen Oak Zoo the following morning for behind-the-scenes tours & a special sea lion feeding session. Limited to 20 adventurers.

www.wildlifeprairiestatepark.org
www.glenoakzoo.org

More information will be posted in next months forum for the pre-conf. trip, or go to **www.aazk2006.org** for updates. Questions? Contact Cruzanne Lewis at **clewis@lpzoo.org**.

CHAPTER CHALLENGE

The Lincoln Park Chapter will continue with the Chapter Challenge that was started by the Cleveland Chapter at the 2003 Conference. In order to help keep the delegates costs as low as possible, while still putting on a conference worthy of our predecessors we encourage all AAZK chapters to donate. Any Chapter donating $250.00 or more will be entered into a drawing with the winner receiving one full registration and one double occupancy room for five nights at the Millennium Knickerbocker (Sept. 15-19). Total value of this prize is almost $1200.00! Questions? Email to **mskidmore@lpzoo.org**

AUCTION ITEMS

If you are donating an item for the auction, it would be helpful to send it early to: Lincoln Park Zoo, c/o AAZK/Hoofstock, P.O. Box 14903, Chicago, IL 60614. (If sending UPS send to 2300 N. Cannon Drive instead of the P.O. Box).

OFFICIAL CONFERENCE AIRLINES

United Airlines is the official conference airlines. They will offer a 7% discount off current fares purchased 30 days or more prior to departure; 2% off current fares less than 30 days out. Valid for O'Hare or Midway airports from 11-24 Sept. 2006. Discount Code #537TG

Creation of a Bill Sleeve and the Use of Operant Conditioning to Improve the Care of Hornbills at Lincoln Park Zoo

By Nicole Kehl, Lead Birdhouse Keeper
Lincoln Park Zoo, Chicago, IL

Introduction

The benefits of using operant conditioning for captive animals have been documented. There are three main ways in which operant conditioning has been demonstrated to benefit captive animals: through improving animal well-being, veterinary care, and husbandry. Many studies have documented a reduction of stress and an increase in species-typical behaviors for animals in an operant conditioning program (for example, chimpanzees, Bloomsmith et al, 1993; drills, Desmond et al, 1987, as cited in Mellen & Ellis, 1996; otter, Hurley et al, 2002; rhinoceros hornbills, Flowers-Reynolds, 2004). Operant conditioning has also been found to act as enrichment for captive animals by providing physical and mental stimulation.

Second, operant conditioning is increasingly being used to assist with medical procedures. With properly conditioned animals, many medical procedures can be performed voluntarily with minimal or no restraint. Some examples that illustrate these advancements are: voluntary blood collection (tigers, Wiebe, 2002; African penguins, Ennis et al, 2002; king penguins, Root and Imboden, 2001), hand injections (chimpanzees, Perlman et al, 2004), artificial insemination (elephants, Hildebrandt, T.B. et al, in press).

Finally, operant conditioning has resulted in improved management on a day-to-day basis (Mellen & Ellis, 1996; Stephens, 1986). Advancements in husbandry techniques allow managers to closely monitor the animals through their compliance with behaviors such as: voluntary shifting (mammals, Mellen & Ellis, 1994), urine collection (gorilla, Bond, 1991; vervet monkeys, Kelley & Bramblett, 1981; killer whales, Krames, 1984); feeding individuals in a group (chimpanzees, Bloomsmith et al, 1994); training dams to care for their young gorilla, (Fisher, 1989; Joines, 1977); and voluntary weights (African penguins, Ennis et al, 2002). These behaviors have facilitated a detailed level of care that would be impossible without animal cooperation.

Many bird species are particularly challenging to manage in captivity because they spend the majority of time perched high in their exhibit. While they can be observed with binoculars, subtleties are often missed since birds are adept at masking many signs of illness. Considering these obstacles to managing birds in captivity, it would be beneficial to have close daily observations of individuals to better assess their physical well-being.

When birds are captured and manually restrained, animal care staff members are able to physically inspect them. While these inspections allow for close physical contact with an individual, they are too infrequent to be of much benefit to daily health monitoring; many birds are captured only for annual physicals or if there is an existing or suspected medical concern. Depending on the species and the size of the enclosure, it can take extended periods of time to catch an individual bird. Even captures that are short in duration can result in potentially fatal medical conditions, such as capture myopathy (an acute degeneration of muscle resulting from intense muscular exertion). If capture myopathy does not result in an immediate death, muscle and myocardial scars may contribute to death weeks after capture (Dabbert & Powell, 1993). Basic operant conditioning can reduce or even eliminate the need for stressful catch-ups.

In 2003, 1.1 Blyth's hornbills (*Aceros plicatus*), were incorporated into the operant conditioning program at Lincoln Park Z00 (LPZ). Both birds are currently 10 years old, were parent-reared, and are pair-bonded. The hornbill's exhibit is over 610cm (20 ft.) tall and the birds spend the majority

of their time on the highest perches making it difficult for animal care staff to perform close daily visual assessments of the birds. Therefore, one of the initial goals of the training program was to train both birds to come down to designated areas in the exhibit where they could be observed at close range. Other goals were to train the birds to become tractable, obtain voluntary weights, and provide an additional source of enrichment for the birds. Both individuals were trained to meet these original goals in less than a year, with no training being done during the breeding season. (See Appendix I for details of the initial operant conditioning program of the Blyth's hornbills at LPZ).

At this point, we wanted to come up with new training goals that would benefit not only LPZ's hornbills, but also potentially benefit the entire captive population of hornbills. Recently, the Coraciiformes Taxon Advisory Group (TAG) has been investigating casque health of *Buceros*. Since 1985 seven cases of fatal squamous cell carcinoma have been documented in the U.S. captive population of giant/Indian hornbills (*Buceros bicornis*) (Gamble and Kehl, 2005). The disease is usually first observed as a small blemish on the casque that quickly spreads into the sinus cavity. Even though this condition has not been diagnosed in other captive hornbill species, including the Blyth's hornbills, there was a need to develop a way to monitor the casques of all hornbills on a regular basis.

In order to better monitor the casque health of the hornbills at LPZ, a bill sleeve was developed. The idea originated from an arm sleeve that was created to obtain voluntary blood collection from a diabetic drill (*Mandrillus leucophaeus*) at The San Diego Zoo (Priest, 1991). The arm sleeve consisted of a tube, cut to the length of the drill's arm, with a steel rod attached to the end of the tube. The drill was trained to put its arm into the sleeve and grasp the rod, thus, improving the safety for the animal care staff, as it could not easily grab the trainer and blood could be drawn safely.

The design of the LPZ bill sleeve mimics the primate sleeve, in that the hornbills place their bills into the tube and hold onto an object, making it impossible for the birds to grab the animal care staff with their powerful bills.

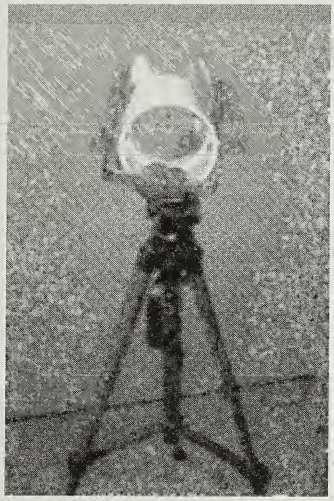
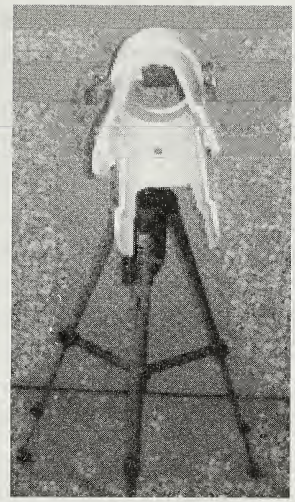
Construction of the Bill Sleeve

The bill sleeve was constructed using a white "wye" polyvinyl chloride pipe (PVC) with dimensions specific to the size and diameter of the Blyth's hornbill's bill and casque (15cm [5.9"] diameter PVC). Two of the pipes forming into the "wye" were partially removed in order to create an opening for the bird's head. The end facing the birds was cut to allow them to comfortably rest their keels against the sleeve. The sides of the PVC had oblong holes cut into them to provide a viewing area of the casque.

A piece of 1.9cm (~.75") flat-iron was cut and shaped to a "U" to fit along the sides and end of the sleeve. A small KONG® toy, a hive shaped rubber chew toy made for dogs, was added to the end of the flat-iron as the object the birds would grasp with their bills. A hole was drilled in each side of the PVC to fasten the flat iron to the sleeve with butterfly nuts and bolts. All sharp edges on both the PVC and flat-iron were ground smooth.

Before the flat-iron was attached to the PVC, holes were drilled at 2.5cm (.98") intervals on the flat-iron, so that the distance that the bird had to go to grab the KONG® could be adjusted according to the individual bird's training progress. The sleeve was affixed to the top of a tripod to allow for height adjustments depending on where and how high the birds were perched during training sessions. The tilt on the head of the tripod also allowed the sleeve to be positioned according to an individual bird's comfort and perceived personal preferences.

(See Figures 1-3 for different views of the bill sleeve)

Figures 1-3: Front, back and side views of "bill sleeve" *(Photos by Greg Neise)*

Training Method

The bill sleeve was first brought into the exhibit during daily training sessions in order to desensitize the birds to its presence. It was decided that the male hornbill would be trained on the bill sleeve first, so the sleeve was incrementally moved closer to his station. Once the sleeve was within the male hornbill's reach, he explored the entire device by biting the PVC pipe, grabbing the KONG® from outside the sleeve, and biting the legs of the tripod. While it was positive that he was interacting with it, these behaviors were never reinforced. After a couple of sessions of allowing the male to explore the sleeve, a verbal and visual cue was introduced. The verbal cue, "bill," was given while the trainer simultaneously touched the KONG®. Any movement that the male hornbill made toward the opening of the sleeve was reinforced using a whistle bridge. The bird quickly learned to place its bill inside the sleeve and briefly grab the KONG®, at which point the bridge was delivered, the bird removed its bill from the sleeve, and received a primary reinforcement. Once the bird was reliably performing this behavior, the duration of time in which it held onto the KONG® was increased.

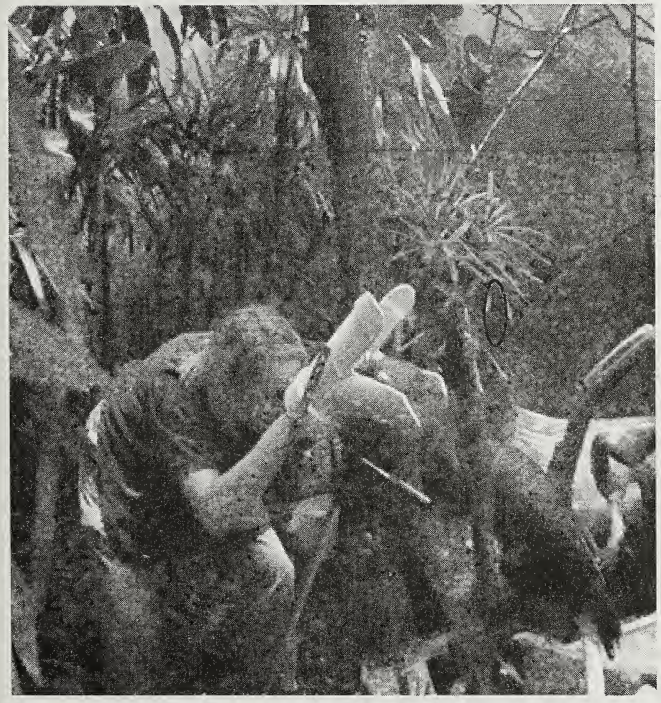


Photo 1: 1.0 Blyth's hornbill with head positioned in bill sleeve during operant conditioning session. *(Photos by Greg Neise)*

At this stage of the training, it was decided that an extra safety step needed to be added into the training of the final behavior. In addition to monitoring casque health, a major goal of this training was to facilitate full voluntary physical examinations by veterinary staff. The veterinary staff was already incorporated into the training by coming to a session weekly, and over time, had approximated themselves until they were standing behind the male hornbill, so that they would be in place to perform a physical examination. Since the trainer and veterinarians work in an unprotected contact situation there was the possibility that the birds could remove their bills during an examination, before the end of behavior signal was given, and grab the veterinarian. Therefore, an extra safety measure, the trainer holding onto the bird's bill was added into the shaping of the final behavior. This created a new challenge since neither bird had ever allowed a keeper to voluntarily restrain them.

To train the behavior of bill hold, the male hornbill was initially reinforced to allow the trainer to touch his bill once he was holding onto the KONG®. Over time, this was changed to the trainer grasping the bill and increasing the tension with which it was held. After consistent compliance was achieved, the duration of time, which the bill was held, was increased by small increments.

The final behavior consisted of five steps: (1) the trainer cueing, verbally and visually, for the bird to put its bill into the sleeve; (2) the bird grabbing the KONG®; (3) the trainer grasping and holding onto the bill until the bridge was delivered; (4) the trainer releasing the bill; and (5) the bird removing its head from the sleeve and receiving the reinforcement. During the later stages of shaping, the trainer only bridged the hornbill when he was calm during the manual restraint of his bill.

Through previous training, positive verbal reinforcement had been established as a secondary reinforcer with the male hornbill, therefore this was used to assist with creating a calm environment for him, while he had his head inside the bill sleeve and was being manually restrained, until the primary reinforcer could be delivered (It is our experience that the effectiveness of this type of reinforcement varies between individuals). The end result was the male hornbill calmly allowing the trainer to manually restrain him while in the sleeve for extended periods of time.

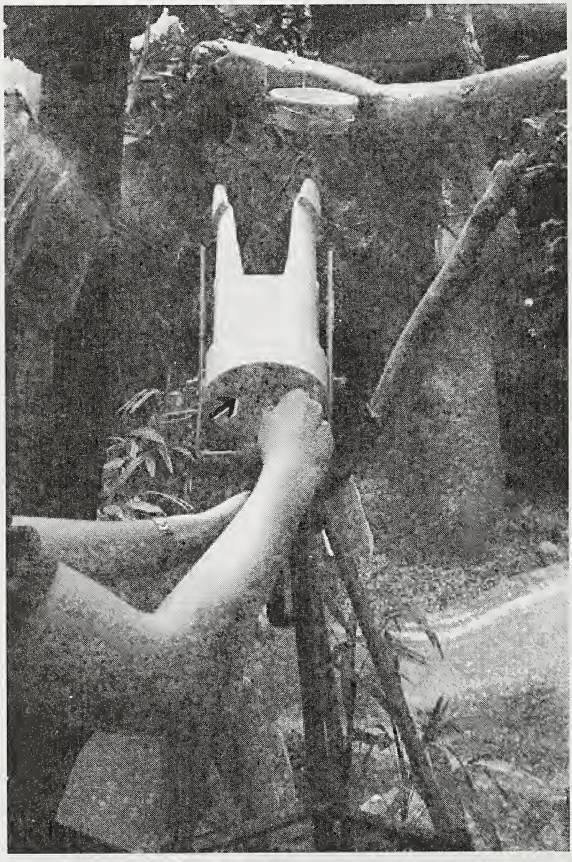


Photo 2: Final behavior with 1.0 Blyth's hornbill voluntarily being restrained in bill sleeve; the arrow denotes bill position in sleeve and technique for bill hold. *(Photo by Greg Neise)*

Discussion

Overall, the hornbill training program at LPZ, has been beneficial for the both the birds and staff. Visual assessments are performed on a daily basis and weights are obtained twice a month. While daily enrichment is given to the birds, it appears that the training has also been an excellent way to provide additional physical and mental stimulation.

Another benefit has been the training's positive effect on the female hornbill's behavior. Historically, keepers entering and servicing the exhibit had caused a great deal of anxiety in this bird. Since training was implemented, she is much calmer in the presence of keepers and appears more comfortable in her environment. It is the author's belief that this new comfort level contributed to the breeding success of this pair in the summer of 2004.

Finally, since many of our sessions are conducted in full view of the public, this has created an opportunity for visitors to see keepers interacting with animals. Post-training, keeper informational sessions provided information about the importance of operant conditioning and the way in which it contributes to improved animal well-being.

The creation of the bill sleeve brought a new and detailed level of care to the hornbills at LPZ by serving as a tool to allow the animal care staff and veterinarians to better monitor both casque and overall health of the hornbills with minimal stress. While this was the original intent of the bill sleeve, it is now evident that due to the design of the sleeve, simple modifications can be made to allow the sleeve to serve as an effective veterinary and husbandry tool not only for hornbills, but also with other large-billed birds.

Just as important, the bill sleeve could also be used to meet the specific needs of individual birds by creating a safe environment for both preventative medical care and treatment for existing medical conditions. Possibilities for future use of the bill sleeve include full physical examinations, treatment of eye and bill injuries, nail trims, cloacal swabs and blood collections.

In addition to making adjustments to the bill sleeve design for use with other species or individual birds, there are other changes that could make the bill sleeve an even more effective husbandry device. For example, the next bill sleeve that is constructed at LPZ, will be fabricated from clear PVC, which would allow for unobstructed inspections of the head, bill and casque. However, at this point, it is also unknown if clear PVC will effect the compliance of the birds to the bill sleeve.

As captive management of birds moves forward, there is a commitment to improve their well-being and enrich their lives. Advances in operant conditioning will play a critical role in meeting these goals. The bill sleeve is just one tool that promises to assist with this progress.

Acknowledgements

I would like to thank ASAG for providing me with the opportunity to present my work with the hornbills at the AZA Regional Conference in Kansas City, MO, March 2005. I would also like to thank Lincoln Park Zoo for its ongoing support of the animal care staff and projects that improve

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APPENDIX I:

Initial steps in the operant conditioning of 1.1 Blyth's hornbills

Step 1: Conditioned the bridge – a whistle was used as the bridge. The sound of the whistle was paired with grapes that were delivered to the birds skewered on the end of a dowel rod.

Step 2: Target training – A target was made for the birds by attaching two different colored Tupperware lids back to back on the end of a dowel rod. The white lid was assigned to be the male's target and the blue lid was assigned to be the female's target. The target was introduced to the birds by letting them approach the keeper to investigate the target. The birds were reinforced for any movement made towards their designated target until they were eventually touching it with their bills. Once simple targeting was established, the birds were trained to follow the target to different locations in the exhibit. This was accomplished by moving the target in different directions so the birds would have to follow it in order to make contact. The distance was increased between the birds and the target so that the birds either had to hop or fly to reach the target. This enabled the trainer to move them to their assigned training stumps where scale and sleeve training took place. Tree stumps were used so that they could be left in the exhibit at all times and still keep the naturalistic look of the exhibit. Perching was added close to and on the stumps.

Step 3: Scale training – Birds were desensitized to the presence of a scale on their training stumps. Once the birds became used to the scales, they were targeted onto the scale and weights could be obtained.

Steps 1-3 were reliably under stimulus control in approximately six months with no training being done during the breeding season.

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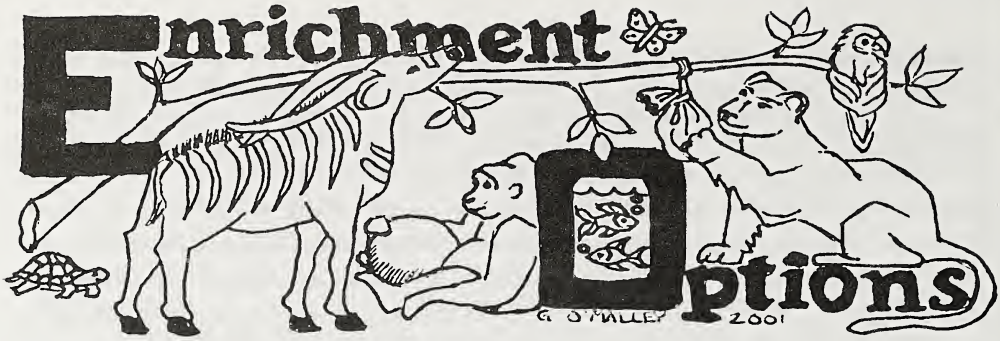

EO Editors - Dawn Neptune, Utah's Hogle Zoo
and Rachel Daneault, Disney's Animal Kingdom

Enrichment is dead!

Dr. Joseph Barber
Facilitator - Standardized Guidelines
Disney's Animal Kingdom, Lake Buena Vista, FL

It is the year 2025, and enrichment is dead. We all saw it coming; we all had been watching its slow demise for the last 10-15 years. We all stood watching as it just slipped away. It wasn't that it was too hard or took too much time; it wasn't even the cost. Post mortems certainly won't find that enrichment died from a lack of staff commitment. What was the cause? Why didn't anyone try to help it?

Well, we don't have to look any further than the biological concept of evolution for the answers. It isn't that the idea of enrichment will die-off, it is that enrichment will evolve into something even more effective in the coming years – the welfare framework. The process has already started. Just think about it, 50 years ago there was little in the way of formalized approaches to enrichment in any captive animal environment. That is not to say it wasn't being done. People have always cared about animals in captivity, and have worked long and hard to meet their needs. Each person had their own ideas as to what to provide them, and why it was important to do so. If you like, all these different ideas represented scraps of DNA that code for various enrichment ideas and techniques. What was missing was something substantial and tangible that would eventually form the basis of enrichment as we know it today. However, the more that people talked to each other, wrote about what they did, and went to conferences and meetings, the more that this DNA began to combine together. Once the genetic snowball gets rolling, it is hard to stop it, and the consequences of this enrichment evolution are plain to see all around us.

The idea of the 'enrichment program' that emerged from Disney's Animal Kingdom (Mellen & MacPhee 2001; www.animalenrichment.org) is just one of several enrichment 'species' that now exists throughout the zoo and aquarium community. Some of these 'species' are highlighted in the AZA's 'Managing Animal Enrichment and Training Programs' (MAEPT) course. Each individual species shares some traits that are common for the entire genus: enrichment is based on promoting species-appropriate behaviors, and aims to provide choice and control to the animal within their captive environment. The enrichment program presented in the MAETP course, and already adapted by many zoos and aquariums, has actually evolved into a six-legged SPIDER (well, there are a few risks with playing around with DNA!). The SPIDER model represents the six important components of an enrichment program, where SPIDER is an acronym of those components: **S**etting goals, **P**lanning, **I**mplementing, **D**ocumenting, **E**valuating, and **R**eadjusting (see www.animalenrichment.org for more details).

SPIDER has evolved to survive in a wide range of habitats. It doesn't mind whether it is on the land, in the air, or under the water – it is well adapted to all terrains, altitudes, latitudes and weather

conditions. All SPIDER really needs to survive is a nurturing enrichment philosophy, one that everyone agrees upon and abides by. For example, enrichment at Disney's Animal Kingdom is seen as everyone's job, whether you are an educator, a keeper, a veterinarian or a director. Enrichment is also seen as something that is an integrated element of animal care on a daily basis, just like veterinary care or proper nutrition. It is not something that is done only when there is time. Enrichment must also play two roles: reactive to the needs of animals as these change over time or as problems arise, but also proactive to ensure the needs of animals are met before any problems are allowed to occur. And finally, enrichment must be holistic by looking to change any and all aspects of the animals' captive environments to ensure that the needs of the animals are met.

It looks like enrichment is thriving in most of its habitats. However, there are always predators such as the 'greater spotted, thin-tailed budget cut-back' (Budgetti horribilus) that are looking for the weak and infirm, but these can usually be kept at bay with little more than enthusiasm and commitment. There are also some SPIDER mimics out there. They are a different beast altogether, and compete for time and attention. Genetic studies would show a clear difference between SPIDER and these mimics, but for those of you without access to genetic labs you can easily tell the difference by counting legs. An enrichment SPIDER should have six legs (yes, I know this is confusing, but that is genetics for you). A SPIDER mimic only has three legs, and tends to wander aimlessly around in circles without going anywhere in particular. You see, SPIDER mimics don't have the **D**ocumenting, **E**valuating and **R**eadjusting components that are essential to any enrichment program. Without these components, it is not possible to ensure that enrichment provided to animals is effective or plays any role in meeting their needs.

Enrichment has certainly come a long way from its primordial beginnings, and still has a long way yet to go. After all, it is not perfect. One of the criticisms of enrichment is that it has too limited a focus to be truly effective. If the natural history of an animal shows that it lives in large social groups, but the exhibit in which it is housed only has room for a single individual, then there is going to be little in the way of enrichment that can be provided to meet the social needs of the animal. Mirrors, videos of conspecifics, scents, and keeper interactions will all provide some opportunities, but can never be sufficient by themselves. In this case, the animal needs to be housed in a large exhibit with other conspecifics if it is going to experience good welfare. The decision concerning what new exhibits need to look like, or how large social groups should be, both fall outside of the scope of most enrichment programs.

Nevertheless, the goal of most enrichment programs is actually very broad. It is not simply to provide animals with enrichment, just by throwing any object you find lying around into an animal exhibit. Instead, enrichment is developed to promote particular behavioral goals with the ultimate objective to ensure that animals experience good welfare. Ensuring animal welfare is not unique to enrichment programs, however. In fact, animal welfare should be an over-arching goal for every aspect of animal care within zoos and aquariums, from the veterinary care provided to animals, their on and off-exhibit habitats, their social groups, the type of training that they participate in, the nutritional quality of their food and how it is provided, to the research studies that help us learn more about the needs of the animals. If we want to ensure that animals really do experience good welfare in captivity (not just the best welfare we can offer at any point in time), then we need to look beyond separate animal care programs towards an integrated welfare framework.

There are three fundamental building blocks to a welfare framework. The first building block is the need for all institutions to have the essential animal care programs in place (e.g., enrichment, animal training, nutrition, veterinary care, habitat, husbandry and research), with financial and staff support for each program. This will be hard and intensive work, but represents the only ethical choice open to us with our greater understanding of what animals need in captivity. As discussed above, an enrichment program is made up of six essential components (SPIDER – see www.animalenrichment.org), and each of the other animal care programs has, or will eventually have, its own set of essential components. The animal training program at Disney's Animal Kingdom is also based on the SPIDER model (see www.animaltraining.org). The Nutrition Advisory Group (NAG) of the American Zoo & Aquarium Association recommends four main components for an effective nutrition program (see www.nagonline.net/feeding_guidelines.htm).

The second building block of the welfare framework is for each component of these animal care programs to be effective. If components are missing or not used, then the entire animal care program becomes less effective because of it. Don't forget that poor three-legged SPIDER, helplessly wandering around in circles. We want to make sure that all of the animal care programs, whether SPIDERs or not, have all the legs they need to make progress towards the goal of ensuring animal welfare. By assessing how well our current animal care programs are working, and selecting those components, methods and techniques that are most effective, we can perform a little artificial selection of our own, and create increasingly more effective programs in the future.

With all this talk about ensuring that animal care programs have the right number of legs, we should also consider what other body parts our animal care programs need. This is important, as the third building block of the welfare framework is the need for all animal care programs to be integrated, to communicate with one another, and to all be headed in the same direction, towards a common goal. If you are lucky, you may even find a great deal out there – buy enough legs for your animal care program and get eyes, ears and a mouth for free. If there are animal welfare issues that need to be solved, then having all animal care programs integrated will be the best way to find a solution; an enrichment program by itself may not be sufficient. There are many ways to integrate these different programs. Veterinary care needs to be a consideration in the approval of enrichment initiatives; enrichment needs to be a consideration in the presentation of nutritionally balanced foods; animal training needs to be a consideration in helping animals make the most use of their habitats; habitats should be designed to allow for enrichment and training opportunities throughout the environment, and so on.

If all three of the building blocks of the welfare framework are in place, then we will have significantly increased the likelihood that animals in our collections will experience good welfare. The welfare framework would represent a positive and proactive approach to ensuring animal welfare throughout the zoo and aquarium community. There are no guarantees in this business, however, and research will always play a key role in the welfare framework to determine whether the animals are actually experiencing good welfare. When it comes down it, animal welfare is something that we assess at the individual animal level. Even with the framework in place, some individuals may need greater care and attention to meet their needs.

We are still a long way from having this welfare framework, but if you look closely enough, you may already see the various species of animal care programs engaged in the process of natural selection, constantly improving themselves in a game of 'survival of the fittest'. Eventually, the fittest of these species will intermingle into a whole new, more effective species of animal management – the welfare framework. Ok, I am not sure that makes a lot of genetic sense, but I think you get the idea. Besides, what do you expect from a behaviorist! For now, we should continue to improve the various animal care programs that exist by identifying those essential programmatic components (the legs), and making sure they are fully functioning (no more peg-legged, pirate SPIDERs). At the same time, we can begin to think about what needs to be done to begin the slow process of fully integrating these programs. Don't be alarmed, but enrichment's days are numbered.

It is the year 2025, and enrichment has evolved.

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(Ideas appearing in this column have not necessarily been tested by the editors for safety considerations. Always think ahead and use good judgement when trying new ideas. You are invited to submit material for the Enrichment Options Column. Look in the January 2004 issue of AKF for guidelines for articles acceptable for this column's format or contact the editor at akfeditor@zk.kscoxmail.com for a copy of the guidelines. Drawings and photos of enrichment are encouraged. Send to: AKF/Enrichment, 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054, USA. Eds.)

Leather Elves Enrichment Device Contest

Attention all AAZK members, it's time to put your thinking caps on. The AAZK Enrichment Committee and The Leather Elves are happy to be sponsoring the 5th Annual Enrichment Device Design Contest. If you've got an idea for a device that's just taking up space in your brain, or if you have built something that has worked particularly well with your animals, share it with the world. Entries will be judged on safety, innovation and affordability. Keep in mind The Leather Elves do not weld, and they do not use materials such as sheet metal. The winning device will be named after you, built by The Leather Elves and a portion of the proceeds for each sale will go to AAZK. Please send a written description and a diagram or drawing of your idea (don't worry- you do not need to be a professional artist!!) to:

Robin Shewokis/ The Leather Elves
43 Mutton Lane
Weymouth, MA 02189

Entries must be received by 30 April 2006. The winning design will be announced at the AAZK National Conference in Chicago, IL and highlighted in a subsequent issue of the *AKF*.

Lee Houts Enrichment Excellence Award - Let Someone Shine!

Have you been impressed with an initiative that an individual or group has developed to better enrich their animals? Has an individual or group **you** know, developed an activity for a species in their care that has brought forth breathtaking natural behavior? Do you know an individual or group that has spearheaded a dynamic program helping their department move forward with sustainable, accountable, zoo-wide enrichment? Has this individual or group inspired you through their dedication to enrichment for captive wildlife? If so, you can let them and their colleagues know just how much their hard work is appreciated through the Lee Houts Enrichment Excellence Award. Information for making a nomination will be in the March 2006 issue of the *AKF*, but start thinking now of that special person or group who you think may be an Enrichment Hero! Award recipients and their work will be highlighted in an issue of the *AKF*.

Call for Submissions for Enrichment Options Column

Enrichment Options readers - WE NEED YOU!! We are looking for any and all articles that discuss enrichment processes and philosophies as well as device articles. We are, however, looking for device articles to discuss not only the construction of the device but also the goals, behaviors to be encouraged, process of documentation and findings upon evaluation. We also want to know about the programs, processes and philosophies at your institution and how they work for you.

But here comes the critical piece to this equation. We need you, our readers, because you are our most important contributors. We need you to submit articles for publication because the column simply cannot exist without you. We want to share information with institutions all over the world, but we can't do it without your submissions. We want to hear about how the enrichment process works for your facility. We want to know about specific enrichment devices that are working for your animals. We want to hear your creative perspectives on all things enrichment!

Submissions may be sent in hard copy (also include a disk or CD) to: Enrichment Options, AAZK, Inc., 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054. Or you may submit material electronically to akfeditor@zk.kscoxmail.com. Please send photos, graphs or charts as separate jpg ot tif files. Make sure to provide captions and photo credits. Manuscripts should be sent in MS Word format only. Please provide your contact information, including email and daytime phone number.

We hope to hear from YOU soon! Thank you in advance for your contributions! - *Enrichment Options* Co-editors Rachel Cantrell, Disney's Animal Kingdom and Dawn Neptune, Utah's Hogle Zoo.

Chapter News Notes

AAZK, Inc. is please to welcome a new Chapter to the Association. **The Santa Barbara Zoo AAZK Chapter** is located at the Santa Barbara Zoo, 500 Ninos Dr., Santa Barbara, CA 93103. They currently have 13 professional members. Officers for this new Chapter are:

President.....Josh Charlton
Vice President.....James Traverse
Secretary.....Anne Jordan
Treasurer.....Krissy Boeche
Chapter Liaison.....Josh Charlton

We wish them every success in their conservation and continuing education efforts.

North Carolina Chapter

The last few months have been busy ones for our Chapter. Our 4th Annual Christmas Party was themed a Cowboy Christmas and was catered by two of our very own members! We had great food and lots of fun as well as earning our Chapter some extra funds.

Our new fundraiser "Build Your Own Sundae" has been a hit along with our "Make Your Own Sandwich" which we'll be doing again for an Earth Day lunch presentation in the near future. Through this fundraising we were able to donate money to the Audubon Nature Institute facilities and to the Humane Society of Southern Mississippi for hurricane relief.

We were very honored to be awarded the 2005 Conservation Prize from the Center for Ecosystem Survival for the Conservation Parking Meters we have in our zoo. All the money collected from these is donated to rainforest conservation.

We've been busy in our community by helping out a local greyhound rescue organization, as well as our annual highway cleanup and manning the phones for another UNCTV telethon. Our Chapter is also looking forward to another successful BFR event in May!

Committed to Conservation

New officers were elected for 2006 as well as a new historian position to document all of our Chapter's activities:

President.....Chris Shupp
Vice President.....John Barcza
Secretary.....Leanne Trapp
Treasurer.....Lucy Segerson
Historian.....Hannah Decker
Events Coordinator.....Paige Wilhoit

—Leanne Trapp, Chapter Liaison

Rosamond Gifford Zoo
American Association of Zoo Keepers
On the Path Toward Conservation

Our first year of re-organizing is complete and it has been a very successful year. We currently have eight national members and lots of big plans. Although the re-organization and the new mission statement took a while, we were still able to raise a small amount of money and donate to a few worthwhile causes this past year.

Officers for 2006 are:

President.....Seth Groesbeck
Vice- President.....Deb Tobin
Secretary.....Stephanie Kershaw
Treasurer.....Margaret Dwyer

One of the first things we needed to do after re-chartering was raise money! We sold Rosamond Gifford Zoo AAZK sweatshirts with our logo on the front and "The Top Ten Reasons to be a

Zookeeper" on the back. They are very popular with the zoo staff and docents. From the proceeds we were able to donate to The Belize Wildlife Conservation Center, and buy a new gas grill for the zoo staff.

Our next fundraising project was "Butt Calendars" featuring photos of some of the more popular animals at the zoo. We had only 50 printed, but the response was great, and we were able to realize a profit from the sale. Of course it helped that they came out just before the holiday season.

With some of the money we raised we decided to sponsor a zoo Holiday party. The party was quite successful, and the staff and AAZK members were very generous. We were grateful when the winner of the 50/50 raffle donated the money back to the Chapter. It will be an event few will forget.

We have many ideas for future fundraisers and the upcoming year. Our next project in the works was be a murder mystery dinner held in March. We were very excited about trying this type of event and looking forward to possibly having more in the future. We look forward to another exciting year!

--Stephanie Kershaw, Chapter Secretary

What's your Chapter been up to? Let us know about your successful fundraisers, guest speakers, conservation projects, new officers, new logos, etc. Do you have a new logo you want to show the membership?
We want to hear from you!
Send your Chapter News to the *AKF* Editor at:
akfeditor@zk.kscoxmail.com

Nashville Zoo AAZK

The Nashville Zoo Chapter is pleased to announce their new logo (above) created by Relief Keeper Lindsay Garrett.

We are also in the process of constructing a web page (www.nashvilleaazk.org) containing general AAZK information, plans for upcoming conservation fundraisers, and photos of past events.

--Heather Moats, Chapter Liaison

Snake River Chapter AAZK

The Snake River AAZK Chapter, located at the Tautphaus Zoo in Idaho Falls, ID, is pleased to present its new logo adopted in January of 2005. It was designed by Linda Beard.

--Linda Ellison, Secretary

Dallas AAZK Chapter

Our Chapter had a great 2005 and we anticipate that 2006 will be an even better year.

We held many events that made this past year so successful. We held several fundraisers, including an art auction to benefit our friends in New Orleans. We also participated in a recycling program and held bake sales throughout the year.

Bowling for Rhinos and Sailing for Rhinos were big hits again this year. We would like to thank everyone who worked so hard to make things run so smoothly. Thanks also go out to everyone who came out to both events. We couldn't have done it without you! We would like to wish our Chapter president happy trails on his trip to Indonesia, his prize for being one of the top four money raisers in 2005!

We have lots of plans so we can have a great 2006. They include Bowling and Sailing for Rhinos, continuing with our recycling program, as well as several conservation talks throughout the year.

We would like to take a moment to say a special thank you to last year's officers and say hello to this year's officers.

Last Year's Officers: President Alex Vasquez; Vice President Megan Lumpkin; Treasurer Elana Kopel; Secretary Sue Thompson; and Liason Erica Malmberg.

This Year's Officers:

Alex Vasquez.....President
Megan Lumpkin.....Vice President
Lora Salkeld.....Treasurer
Becky Wolf.....Secretary/Liason

A big thank you to everyone who worked so hard to make 2005 so successful. We can hardly wait to see what our Chapter can accomplish this year!

--Becky Wolf, Secretary/Liaison

Animal Keepers Association of Africa

An African ntework for ethical and competent keepers

The continent of Africa has now established its own Animal Keepers Association (AKAA). This initiative began as a Working Group of PAAZAB (African Association of Zoos and Aquaria), and has since been constituted as an autonomous organization. At the inaugural meeting on 28-29 September 2006 there were 42 delegates representing 10 institutions from Lusaka all the way to Cape Town. The focus of this initial meeting was the following: 1) Establish the Animal Keepers Association of Africa; 2) Develop membership structure; 3) Develop a constitution; 4) Develop effective communication methods with members; and 5) Develop Objectives, Goals and Data Bases.

AKAA Interim Steering Committee Members are: Robynn Ingle-Moller (National Zoo) Chairperson; Gabrielle Harris (Sea World, Shaka Marine World) Vice Chairperson; Dominic Moss (Johannesburg Zoo); Tshepang Makganye (Johannesburg Zoo); Robyn Greyling (Bayworld); and Mark Howitt (National Zoo).

Animal Keepers Association of Africa Proposed Core Values include:

• NETWORKING: To provide the most productive and substantive forum possible to ensure constructive interface, equity and communication between individuals in the field of animal care.

• WELFARE: To provide the best and most ethical animal management practices for animals in human care

• KNOWLEDGE: To generate information sharing amongst the membership so that the industry as a whole remains professional and progressive

• SERVICE EXCELLENCE: To exhibit animals in an ethical, educational and inspirational manner that serves to preserve their dignity and inspire the public to holistic conservation action and informed animal welfare.

• CONSERVATION: To ethically and responsibly care for and utilize animals in our collections in a manner that serves and promotes conservation.

The Conference & AGM of the Animal Keepers Association of Africa is planned for 10 &11 August 2006 at the National Zoological Gardens in Pretoria. A Call for Papers & Posters is now open & to be posted to: robyn@zoo.ac.za for review by the interim committee. Matters under discussion at the meeting will include: Mission Statement; Membership matters/solutions/problems; Code of Conduct; Product/benefits; and will provide an opportunity for caregivers from different areas of expertise/distance & country to meet & greet. For more information visit their website: http://www.zoo.ac.za/akaa

(*Editor's note*: AAZK Board Member and ICZ Representative Shane Good (Cleveland Metroparks Zoo) reports that the International Council of Zookeeping was instrumental in helping AKAA along, especially the ICZ steering committee representatives from ABWAK (Great Britain). He reports the ICZ has also offered assistance in helping new associations get started in Scandinavia, Japan, and The Philippines. There are currently zoo keeper associations in the U.S., Great Britain, Australia, Germany, France, Spain and The Netherlands. The professional network of zookeepers is growing!)

Have you purchased your *LIVE WILD* Paw Magnet yet?

Help support the 2006 National AAZK Conference and *Zookeepers on Tour* by proudly displaying your Paw Magnet on your car, your locker, filing cabinet, etc.!

To order see www.aazk2006.org

Institutions wishing to advertise employment opportunities are asked to send pertinent data by the ***10th of each month*** *to: Opportunity Knocks/AKF, 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054. Please include closing date for positions available, and when setting these dates keep in mind that because of bulk-mail, most readers do not receive their AKF until the middle of the month or later. There is no charge for this service and fax or e-mail listings of positions which become available close to deadline are accepted. Our Fax is (785) 273-1980; e-mail: akfeditor@zk.kscoxmail.com< Listing must be sent as MS Word attachment. To post a position on the AAZK website, have listing to email address above by the 25th of the month for posting on the first day of the following month. We are no longer located at the Topeka Zoo, so please note new address to avoid delays in processing.*

Animal Keeper 1 – Buffalo Zoo, Buffalo, NY
Submit resumé and cover letter to: Kevin J. Murphy, Buffalo Zoological Gardens, 300 Parkside Avenue, Buffalo, NY 14214. ***Closing date is 1 May 2006. EOE.*** The Buffalo Zoo is accepting applications for an Animal Keeper I to work in its elephant complex. The Zoo is seeking a highly motivated keeper/trainer who thrives in a team environment. Elephant handling experience preferred. **Responsibilities:** Will work daily in the husbandry, training, handling and enrichment of elephants, rhinos, California sea lions and river otters. **Requirements:** The selected candidate will have excellent record keeping skills. Position requires an AAS degree (bachelor's preferred) in a zoology/biology related field. One (1) year paid experience in the husbandry/training of elephants required. Public speaking experience and familiarity with aquatic life support systems preferred.

The following six (6) positions are available at the Fort Worth Zoo, Fort Worth, TX. To apply for any of the positions, send letter of interest and resumé to: Human Resources, Fort Worth Zoo, 1989 Colonial Parkway, Fort Worth, TX 76110 or Fax to 817/759-251. Make sure to specify which position you are interested in when sending your letter. ALL Positions open until filled.

1. Assistant Curator of Ectotherms
The Fort Worth Zoo is seeking to fill an Assistant Curator of Ectotherms position. The nationally-ranked Fort Worth Zoo has a long tradition of breeding success and leadership in herpetology and is moving toward construction of a new Herpetarium. **Responsibilities:** The successful candidate will be responsible for day-to-day operations of the Herpetarium including supervising and training staff, volunteers and interns. The position will work with the Curator to develop and implement a strong, dynamic, progressive program in herpetology. The position also will monitor and implement safety programs for staff working with venomous animals. **Requirements:** Strong reptile and amphibian husbandry, organization, and team-building skills are a must along with demonstrated supervisory and management skills, including communication (verbal and written), problem solving, participative management style, collaboration leadership, motivation of staff, good time management, and decision making skills. Experience with venomous snakes is required. Experience in exhibit design, research, and publication is also desirable.

2. Carnivore and Hoofstock Keeper
The Fort Worth Zoo is currently accepting applications/resumés for this position. **Responsibilities:** This position will provide primary care for a variety of carnivores and hoofstock. Depending on experience the successful candidate may work with a variety of carnivores (e.g., cheetah, tigers, lions, and bears) and/or a diversity of hoofstock (e.g., rhino, bongo, giraffe, zebra, bison, and several species of antelope) Staff is responsible for providing animal care, animal training, enrichment, monitoring animal health, maintaining cleanliness of animal areas, and minor exhibit modification. The successful candidate will also provide both formal and informal presentations for the public. **Requirements:** Position requires a high school diploma or equivalent, one (1) year zoo keeping experience with carnivores and/or hoofstock. Good communication/organizational skills and the ability to work well with others in a team environment are a must. **Salary/Benefits:** Starting salary $11.00/hr., plus benefits.

3. Primate Keeper
The Fort Worth Zoo has an open position in its World of Primates exhibit. This position provides the unique opportunity to work with all four great apes (gorilla, orangutan, chimpanzee and bonobo), as well as gibbons, black-and-white colobus, and mandrill. **Responsibilities:** The successful candidate will be responsible for providing animal care, monitoring animal health, maintaining cleanliness of animal areas, providing enrichment and training, and making minor exhibit modification. **Requirements:** Position requires a high school diploma or equivalent, one (1) year zoo keeping experience with primates, good communication/organizational skills, and the ability to work well with others in a team environment. **Salary/Benefits:** Starting compensation is $11.00/hr., plus benefits.

4. Nutritional Services Keeper
The Fort Worth Zoo is currently accepting applications/resumés for the above referenced position.

Responsibilities: Include daily preparation and delivery of food/supplies to animal buildings and exhibit areas; diet preparation, including proper use and maintenance of commissary equipment/areas; maintaining quality control of all food items, stock handling procedures and inventory. **Requirements:** Food handling experience is preferred. A college degree in nutrition, biology, animal science or other food management degree is desirable. Candidates must be able to work irregular hours including weekends and holidays; have the ability for required lifting, bending, stooping, and walking; possess good communication and organizational skills, and the ability to work well with others in a team environment. A physical, drug screen, and background check are required for this position. All applicants must be 18 years of age or older. **Salary/Benefits:** This is an hourly, full-time benefited position, and starting pay rate $11/hour.

5. Lead Herpetarium Keeper
The Fort Worth Zoo has an open lead zoo keeper position in its herpetology department that includes nearly 160 reptile and amphibian species. **Responsibilities:** The successful candidate will work closely with the Assistant Curator and will aid in supervising and training staff, scheduling, insuring safe work practices, providing animal care, monitoring animal health, keeping accurate records, maintaining cleanliness of animal areas, propagation, interaction with Zoo visitors and exhibit modification and minor maintenance. **Requirements:** Position requires a high school diploma or equivalent. A college degree in a biological field is preferred, but not mandatory. Five (5) years zoo keeping experience with reptiles and amphibians and venomous species is required. Good communication/organizational skills and the ability to work well with others in a team environment is a must. Candidate should be able to lift 50 pounds; this position may require other physical demands such as bending, stretching, climbing, etc.; working in extreme weather conditions (heat, cold, rain, etc.). A background check and drug screen are required of final candidate. **Salary/Benefits:** Starting salary $14.00 plus benefits.

6. Herpetarium Keeper
The Fort Worth Zoo has an open zookeeper position in its herpetology department that includes nearly 160 reptile and amphibian species. **Responsibilities:** The successful candidate will be responsible for providing animal care, monitoring animal health, keeping accurate records, maintaining cleanliness of animal areas, propagation, interaction with Zoo visitors and exhibit modification and design. **Requirements:** Position requires a high school diploma or equivalent. A college degree in a biological field is preferred, but not mandatory. Two-years zoo keeping experience with reptiles and amphibians is required. Venomous experience preferred. Good communication/organizational skills and the ability to work well with others in a team environment is a must. Candidate should be able to lift 50 pounds; this position may require other physical demands such as bending, stretching, climbing, etc.; working in extreme weather conditions (heat, cold, rain, etc.). A background check and drug screen are required of final candidate. **Salary/Benefits:** Starting salary $11.00 plus benefits.

Full-time Warden - Six Flags Great Adventure Wild Animal Safari Park, Jackson, NJ
Interested candidates should submit a resumé to: Karol Kempke, Human Resource Manager, P.O. Box 120, Jackson, NJ 08527. We are seeking applications for a full-time Safari Park Warden. The Safari Park consists of 1200 animals including birds, reptiles and mammals. **Responsibilities:** Applicants must have the ability to feed animals, clean houses, and general surroundings. **Requirements:** Applicants must have strength, ability and alertness to work with various species of animals within a Safari Park. Must be 18 years old, have valid driver's license, possess the ability to perform assigned duties in a safe & productive manner and be able to work in all types of weather conditions. Six Flags Great Adventure offers an excellent salary and benefits package. Six Flags is an "Equal Opportunity Employer"

Lead Animal Keeper - Oakland Zoo, Oakland, CA
To apply, send resumé and cover letter to: Colleen Kinzley, General Curator, Email: colleen@oaklandzoo.org or mail to Oakland Zoo, P.O. Box 5238, Oakland, CA 94605; or Fax: (510) 636-9619. **Open until filled. Position Responsibilities:** The Lead Keeper will spend the majority of his/her time in supervisory and administrative tasks. He/she will use leadership skills in interactions with others. He/she will be responsible for supervising the Reptile and Amphibian Building and Invertebrate building in the new Children's Zoo as well as the rest of the Children's Zoo (bats, lemurs, otters and domestic animals). S/he may also supervise additional strings elsewhere in the zoo. Staff within those areas will report directly to the Lead Keeper. He/she will perform job performance evaluations with staff in his/her work section. He/she will be available to assist in procedures and projects, answer questions, facilitate maintenance or grounds work, etc. The Lead Keeper will cover these areas as a floating keeper as necessary. This is a salaried position. At times it will be necessary to work extended hours or days to fulfill the job requirements. The Lead Keeper is also responsible for various administrative and future planning tasks as assigned by the curator. He/she should be capable of taking charge of the Department and addressing all potential problems and emergencies. **Job Requirements**: Minimum of five (5) years experience in the care of wild animals in an AZA-accredited facility; Two (2) years experience as a supervisor - responsible for training supervision, providing performance feedback and conflict resolution; good physical condition;

able to lift a minimum of 50 lbs. (i.e. feed sack) and move a minimum of 120 lbs. (i.e. hay bale); valid driver's license and clean driving record; willingness to work outside normal business hours, including weekends and holidays; good written and verbal communication skills; knowledge of the habits and hazards of working with zoo animals; willingness to work with some physical risk while observing proper safety precautions; good organizational skills; able to manage multi-tasks/projects; substantial experience and thorough knowledge of capture and restraint techniques; thorough understanding of behavioral training theory and practical application; and thorough understanding of safety procedures used with captive wildlife. **Experience and Qualities Preferred:** Bachelors degree in zoology, biology or a related field and experience in care and management of reptiles, amphibians and/or invertebrates. **Salary and Benefits:** $35,360. Medical, dental, life insurance and 401K retirement benefits. Two weeks vacation. Full-time, regular position.

Animal Keeper (2 positions available), Philadelphia Zoo, Philadelphia, PA
To apply, send cover letter and resumé to: Human Resources, the Philadelphia Zoo, 3400 W. Girard Ave., Philadelphia, PA 19104-1196; Fax 215-243-5219; e-mail- zoojobs@phillyzoo.org **Responsibilities**: This is an open relief position that is assigned primarily to mammal areas. The Keeper is responsible for all aspects of daily animal care including but not limited to cleaning, feeding, watering, observation and exhibit maintenance. **Requirements:** The qualified candidate will have a degree in biology or a related field and a minimum of one (1) year of work experience with captive animals in an AZA-accredited institution. **Compensation:** $17.31/ hour plus benefits

Veterinary/Laboratory Technician - Philadelphia Zoo, Philadelphia, PA
To apply, please forward your cover letter and resumé to: zoojobs@phillyzoo.org or: Human Resources, The Philadelphia Zoo, 3400 West Girard Ave., Philadelphia, PA 19104; Fax 215-243-5219. The Philadelphia Zoo seeks an experienced Veterinary/Laboratory Technician to join our veterinary care team. **Responsibilities:** Under the direction of the Senior Veterinary/Laboratory Technician, this position provides technical and medical support/assistance in the care and treatment of all animals in the collection; maintains veterinary facilities, equipment, veterinary records and supplies; assists with immobilizations, surgeries, treatments and radiology; assists the pathology department with laboratory tests on samples, care of hospitalized animals and assists with the care and raising of baby animals as required.
Requirements: Include a degree from an accredited veterinary technician program, AHT certification required, PA certification or certification eligible with a minimum one (1) year; clinical experience in the animal health field. Experience in microbiology and parasitology, working with captive exotic animals, avian/reptilian hematology preferred. Zoo experience preferred; interest in continued professional growth and ability to conduct assigned and/or related research projects concurrently with regular job responsibilities; excellent technical/nursing skills; methodical and detail-oriented; ability to train students and volunteers in animal health techniques and practices, and strong administrative and organizational skills. **Salary/Benefits:** The Philadelphia Zoo offers a competitive compensation package including medical, dental, vision, short- and long-term disability, a 401K with employer match and tuition assistance.

Keeper/Educator - Wild Wonders/Zoofari, Carlsbad, CA
Wild Wonders/Zoofari, Inc. is a private facility located in northern San Diego county. Send resumé to wildwonders@earthlink.net or P.O. Box 2771, Carlsbad, CA, 92008. Direct inquiries to Jackie Navarro. To learn more, check out our website at www.wildwonders.org ***Position(s) available until filled.*** **Responsibilities:** General husbandry of our 100 animals in collection, performing outreach education programs to children and adults, handling and training of animal ambassadors utilized in programs, husbandry training. **Requirements:** Bachelors degree in zoology or related field preferred. Must have strong scripting, show presentation skills, husbandry experience. Looking for hard working, flexible and motivated individuals. Must be available any 7 days of the week including holidays. **Salary/Benefits:** Salary starting at $10/hr plus presentation bonuses. Health benefits included.

Zoo Keeper – Frank Buck Zoo, Gainesville, TX
To obtain position description and application info go to http://www.gainesville.tx.us/HR_jobs.asp or email the Human Resources Dept. at lgore@cogtx.org; phone 940-668-4590; fax 940-668-4588; or submit application at the City of Gainesville Human Resources Department located at City Hall (South Entrance), 200 S. Rusk, Gainesville, Texas 76240. **This position is open until filled**. The City of Gainesville is currently seeking a team-oriented individual for a zoo keeper position at the Frank Buck Zoo. **Responsibilities:** A person in this position will be responsible for the day-to-day husbandry of the animals, including feeding and cleaning, exhibit maintenance, grounds maintenance and education to the public. **Requirements:** Candidates for this position must be detail-oriented, have good communication, people and organizational skills, and initiative. This position requires an Associates or Technical degree in one of the life sciences and/or the right combination of exotic animal experience. Bilingual preferred. Must possess a valid driver's license. Must be able to lift 50 lbs. **Salary/Benefits:** The salary range is from $20,951 to $35,906 annually and includes a benefits package. **EOE**

Zoo Keeper – Claws 'N' Paws Wild Animal Park, Lake Ariel, PA
Send or email resumé to: Vince Hall, Claws 'N' Paws Wild Animal Park,1475 Ledgedale Road, Lake Ariel, PA 18436; vincehall@echoes.net A privately owned zoo in the Pocono Mountains of Pennsylvania is looking for a full-time Keeper. **Responsibilities:** The person selected will help care for a collection of over 120 species of mammal, bird, and reptile. The candidate will do the required feeding, cleaning, and care, as well as present live animal talks to the visitors. **Requirements:** We are especially interested in someone who has worked with reptiles, and has kept and bred them at home and who has had paid experience at another zoo. **Salary/Benefits:** We offer a competitive salary, paid insurance, vacation, and sick days.

Full-Time Keeper Position - Conservators' Center, Inc., Rural North Central NC
Interested parties can reach Mindy Stinner or Douglas Evans by phone (336) 421-0065 or e-mail at mstinner@mindspring.com for additional information. ***This position will be open until filled.*** Position open at a non-profit carnivore sanctuary, educational and breeding facility. The position is for a full-time large carnivore keeper/trainer. The job is M-F, eight hours per day, with hours being somewhat flexible during daylight hours. This facility is not open to the public. **Responsibilities:** *Primary* - Care and cleaning of all large cats in sanctuary (lions, tigers, leopards); observing behaviors for changes and variations, injuries, illnesses, compatibility issues; some target training and a good deal of enrichment work. *Secondary:* Supervising and providing training to volunteers and interns; assisting with veterinary care as needed; assisting with food delivery and preparation as needed This job may expand to include additional responsibilities and authority as the person in the position and the facility continue to grow. **Requirements:** This is a hard work job with serious responsibility for human and animal safety. It will require great efficiency, attention to detail, some physical strength and endurance, and a good deal of patience. No smoking is allowed on site. Previous experience with large carnivores is not required, as training will be provided. However, prior experience working with wild animals is desirable. This position is an incredible opportunity to obtain work experience with large carnivores coming from difficult backgrounds. **Salary/Benefits:** Some benefits are negotiable after a trial period. To learn more about CCI, see our web site at www.conservatorscenter.org .

Supervisor of Field Operations (SFO) - Operation Migration
Please email resumés to the attention of Joe Duff at info@operationmigration.org. NO PHONE CALLS PLEASE. Operation Migration (OM) is registered as a charitable non-profit in Canada and the U.S. and a founding member of the Whooping Crane Eastern Partnership (WCEP). The organization is currently in the 6th year of a very successful reintroduction of endangered Whooping cranes. Methods include conditioning the birds to follow our specifically designed ultralight aircraft in order to teach them an eastern migratory route between Wisconsin and Florida. Operation Migration functions with a small staff, and very modest budget relative to its high profile in the environmental field, its international scope, and the large scale of its activities. As a result, the ideal candidate for this position will first and foremost be a multi-talented team player who is suited to working in a tight-knit, highly collaborative work environment. **Responsibilities:** The Supervisor of Field Operations is responsible for the maintenance and safety of the flock while it is under OM's care, and ensures all protocols are implemented and adhered to.The SFO works closely with a team of biologists, aviculturists and pilots and, as duties and responsibilities are concentrated in four geographic areas, must travel extensively.Loations include:
- USGS Patuxent Wildlife Research Center in Maryland: Coordination, management, and hands-on assistance with early conditioning and training of Whooping crane chicks during the spring hatch season.
- Necedah National Wildlife Refuge in Wisconsin: Managing care of the birds at the introduction site during the summer months and assisting with 'flight training'.
- Migration: Beginning in early October the OM team departs Wisconsin and is on the road for the approximate two months required to complete the southward migration to Florida.
- Florida: Typically in December, the SFO would assist the Winter Monitoring Team until the hatch season begins again.

Minimum Qualifications: Experience in the care and handling of birds; Emergency medical training; Ability to drive a one-ton pick-up truck pulling a 30-foot trailer or motorhome; Conscientious, with good data collection and record keeping skills; Basic photographic skills; Reasonable writing skills in order to contribute website updates to our Field Journal; Personable and outgoing; Able to communicate effectively with fellow staff, supporters and donors; Other desired attributes include flexibility, resourcefulness, and mechanically inclinations; Most importantly this position demands a love of birds; a willingness to work long hours, and the capacity to live in tight quarters for long periods of time.

Raptor Rehabilitator - Beijing Raptor Rescue Center, Beijing, China
IFAW BRRC is seeking raptor rehabilitator candidates, please send email with BRRC Raptor Rehabilitator in subject line and attach letter of interest, current curriculum vitae and three (3) professional references to myin@ifaw.org and qsun@ifaw.org This position reports to the Assistant Director. ***Closing date for application is 15 May 2006.*** **Description of Facility**: IFAW Beijing Raptor Rescue Center (IFAW BRRC)

is one of IFAW's conservation projects in China. In December 2001, IFAW and Beijing Normal University (BNU) jointly established IFAW BRRC on the campus of BNU. As the designated raptor rescue center approved by the Wildlife Protection Station of Beijing Forestry Bureau, IFAW BRRC provides medical treatment, care and rehabilitation training to injured and sick raptors and those who have lost their way in Beijing or are confiscated from enforcement actions. All operation is conducted under the guidance of internationally advanced animal welfare concepts and scientific rescue techniques. For more information about our facility. Please refer to our websites at: http://www.brrc.org.cn and http://www.ifaw.org **Purpose**: The Beijing Raptor Rescue Center is seeking candidates to rehabilitate wild raptors for return to the Beijing suburbs. The raptor rehabilitator is on the front line in interacting with the public, media and government officials regarding raptor conservation, rehabilitation and animal welfare of wild animals. The position requires a person able to: deal with injured and ill animals; treat animals with injuries and illnesses; willingness to complete the tasks under pressure and deadlines; Writing various reports for animal care, management and the functioning of the center. The raptor rehabilitator seeks to practice the high animal welfare and help lead the profession as a model in China and internationally. **Accountabilities/ Responsibilities**: These are minimum qualifications required for the position of raptor rehabilitator. This dynamic and engaging job that includes but is not limited to the tasks listed here. ***Operations/Management-*** Supervise the management of interns, student researchers and volunteers; lead tours for visitors; convey and practice health and safety rules for the center;receive raptor rescue and collection requests in a professional, gracious and informative manner; respond to raptor rescue and collection requests; practice good common sense; communicate effectively with superiors, colleagues and partners; excellent written and verbal communications (both English and Chinese); support fundraising events; maintain facilities for safe routine operations; support legislative work supporting animal welfare and wildlife rescue; maintain record keeping system. ***Animal Care/Rehabilitation*** - Diet preparation; cage and facility cleaning and maintenance;raptor handling and care; treat raptors for illnesses and injuries; locate appropriate release sites and participate in releases; document all relevant health, welfare and research data; perform laboratory diagnostics; support and lead educational programs and media events; record and analyze behavioral data for welfare monitoring;apply and practice good health and safety; perform necropsies and collect biological samples for banking; perform euthanasia when necessary; read reference and new literature on animal welfare, wildlife diseases and rehabilitation; assimilate a working knowledge of animal welfare issues; and develop and implement behavioral enrichment as part of a overall management program. **Requirements/Qualifications:** Fluency in English and Mandarin; must be able to obtain Beijing driver license; must have a good driving record and a minimum of two (2) years driving experience; Beijing residents preferred; must be able to lift and/or move 30 kg; must have a degree in animal science, animal behavior, or veterinary science; advanced degree in animal science, animal behavior, or veterinary science preferred; certifications in veterinary nursing/technology and wildlife rehabilitation preferred; must have an interest in animal welfare and rehabilitation; must have professional experience working with raptors; must enjoy working with raptors; must be a good communicator; must be able to work in a team environment; must be able to learn quickly and apply new knowledge; must be able to work on weekends and holidays; must have current vaccination record; must have current first aid and basic cardiac life support certificate; proficiency in Microsoft Office, internet and statistical software; proficiency in medical/ veterinary diagnostic equipment; empathy with the cause of animal welfare and professional wildlife rescue; committed to promoting BRRC and IFAW's mission; and ability to take initiatives and work independently with attention to detail.

Temporary Keeper Aide - Lee Richardson Zoo, Garden City, KS
Applications will be accepted until the position is filled. Apply at: www.garden-city.org/humanresources/process.html The city of Garden City has a summertime opening for a temporary Keeper Aide at the Lee Richardson Zoo. This is a Full-Time position during the summer only, and is perfect for college students looking for a summer job. **Requirements:** Successful candidate will follow instructions in the feeding and cleaning of a variety of animals and other related duties as assigned. Ability to lift 75 lbs, work outdoors and follow safety procedures essential.

Animal Keeper Internships – Red River Zoo, Fargo, ND
Please send resumé cover letter, college transcript, and three letters of recommendation to Tami Anderson, Red River Zoo, 4220 21st Ave. S, Fargo, ND 58104, or fax at (701)277-9238. Both spring and summer internships are available. All internships are unpaid. For further questions, please contact Tami Anderson, Intern Supervisor, at (701) 277-9240. **Requirements:** Applicants must be at least a sophomore in college with a minimum GPA of 2.0. Must be able to lift 50 lbs. Must be able to work three (3) days per week, eight (8) hours per day for at least two (2) months.

Animal Keeper/Internships -Shell Factory Nature Park and Botanical Trail, North Ft. Myers, FL
We are a new little park that is growing FAST! We have been open just over a year and we have a variety of both wild and domestic animals to care for—Starting pay is $7.50/hr. We are looking for full and part-time applicants. Experience preferred. Please submit your resumé to danika@shellfactory.com or bring it and apply in person at 2787 North Tamiami Trail, N. Fort Myers, FL 33901 (239) 995 2141 ext 545.

Exotic Cat Internship – Center for Animal Research and Education, Bridgeport, TX
To apply for this position please send your resumé and references to Attn: Heidi Riggs, 245 County Road 3422, Bridgeport, TX 76426. C.A.R.E. is currently looking for qualified interns for 2005 and 2006. The Exotic Cat Internships run in 90-day sessions that allow for experience in the zoological field. C.A.R.E. rovides housing for all accepted applicants. For more information please see website at www.bigcatcare.org. **Responsibilities**: Assisting the Curator and Executive Director in planning and coordinating the care, diet, and maintenance of the habitats for exotic felines. Job duties include cleaning, food preparation, maintenance of enclosures and education work with the public. **Requirements**: Candidates must have good written/oral communication skills and the ability to work effectively in a team–oriented environment. Must have or working on a four-year degree in related field. All candidates must have the ability to lift 50 pounds and a willingness to work outdoors. Weekends and holidays are required.

Marine Mammal Internship – Pt. Defiance Zoo & Aquarium, Tacoma, WA
Please contact Jennifer Mack, Assistant Volunteer Coordinator, Education Department, 5400 No. Pearl St, Tacoma WA 98407 or volunteer@pdza.org for an application packet. The intern program in the Rocky Shores Tundra habitats at the Point Defiance Zoo and Aquarium is designed to provide participants with practical learning experience and knowledge in the field of animal husbandry and training (with an emphasis on marine mammals). In return, the intern makes a significant contribution to the Rocky Shores/Tundra area at the Point Defiance Zoo and Aquarium. Positions are available year-round. This is an **UNPAID**, full time position requiring a **minimum** of 10 weeks and 400 hours. Under the guidance of experienced zoo staff, the internship is designed to provide instruction and eventually independent, hands-on experience in the following areas: Care of Animal Habitats, Nutrition and Diets, Environmental Enrichment, Public Presentation/Interpretation,Water Quality and Filtration, Animal Behavior and Natural History and Animal Training and Husbandry.

Aviculture Interns - the Hawaii Endangered Bird Conservation Program at the Keauhou Bird Conservation Center (KBCC) on the Big Island of Hawaii and the Maui Bird Conservation Center (MBCC) on the island of Maui. For more information on internships at KBCC, please send a resumé, cover letter and the names and contacts of three (3) references to: Tracey Goltz, P.O. Box 39 Volcano, HI 96785 or fax: 808-985-7034. For more information on internships at MBCC, please send this information to: Richard Switzer 2375 Olinda Road, Makawao, HI 96768 or fax: 808-572- 3574. Internships last for a 3-6 month period. Interns receive $20/day stipend plus housing. **Responsibilities:** Daily tasks include husbandry duties such as diet preparation, aviary and facility maintenance, behavioral observations of breeding birds, grounds keeping, predator control. **Requirements:** Applicant must be able to live with several roommates in a remote area and should show enthusiasm for work with captive endangered Hawaiian birds. Applicant must have a valid driver's license and health insurance.

Big Cat Internships - Tiger Creek Wildlife Refuge, Tyler, TX
For more information or to download an Application Packet, see http://www.tigercreek.org/internships.html, no telephone calls please, all applicants must complete the Application Packet process for consideration of program participation. The Big Cat Internship as seen on Animal Planet involves Animal Care Apprenticeship and Public Educational presentations involving Big Cats This is a 90-day position (by 4 quarters/terms) allowing one to gain experience in the zoological field. **Responsibilities**: Job duties include cleaning, diet preparation, light maintenance, educational tours, etc. Interns are responsible for the daily cleaning and health monitoring of a large number of exotic feline species including but not limited to tigers, lions, leopards and pumas. Big Cat Internship opportunities also include working in environmental education with schools and youth groups in a variety of learning activities. Interns will present short guided lessons on animal care techniques, conservation and rescue methods, backgrounds on the big cats and much more. This wide variety of teaching opportunities and educational training provides the intern with an exciting array of new skills and experiences. Training is provided by the staff. **Requirements**: At least two (2) years of undergraduate college work in wildlife management, education, biology, or related field. If no college experience then two (2) years of verifiable work experience in unrelated field or one (1) year of work experience in animal care field. All applicants must be at least 20 years of age by start date. These positions require motivated persons with a career focus in biology/zoology/wildlife management. Housing is provided for these non-paying positions. Interns provide a strong commitment to the refuge, with a six- day work week and light duties on Sundays.

Zoo Reptile Internship – Kentucky Reptile Zoo, Slade, KY
To apply, send a cover letter, resumé, transcript, and at least two (2) (preferably 3) references to: Kristen Wiley, Internship Coordinator, Kentucky Reptile Zoo, 200 L...E Railroad. Slade, KY 40376, or email to kyreptil@pop.mis.net. Starting dates are flexible, but a minimum of three months covering spring (April-June) summer (June-August) and fall (September-November) is required. ***Deadline is immediately for Fall is July 2006.*** The Kentucky Reptile Zoo, a nonprofit organization, is seeking student interns for the 2006 season. The zoo is an educational exhibit and venom research facility located near Kentucky's Red

River Gorge and Natural Bridge State Park. **Responsibilities:** The intern will assist in the captive maintenance of the reptile collection, collect admissions to the exhibit, give interprctive talks and interact with the public, assist with educational outreach programs, and perform other duties as assigned. In addition, the intern will be responsible for the completion of at least one research project related to the field of herpetology. The intern will not be involved in the handling of any venomous species. **Requirements:** Desirable qualifications include a willingness to handle snakes and other reptiles on a daily basis, ability to communicate effectively with people, writing skills, attention to detail, and self-motivation. The intern will be required to work Saturday and Sunday, with days off during the week. Students majoring in the biological or natural sciences are preferred. Interns are required to be either college students or recent graduates. Former interns have arranged for academic credit with their institutions. Personal transportation is recommended. A valid driver's license is required. **Benefits:** Benefits include experience with one of the most extensive and diverse collection of snakes in the United States, housing, and $55/week to cover expenses. Interns have been successful in finding zoo keeper positions (over 95% hire rate).

Internship - (Tigers For Tomorrow Exotic Animal Preserve) Fort Pierce, FL
To apply send cover letter and resumé to: Susan Steffens/ Executive Director- Tigers For Tomorrow, 18905 Orange Ave, Ft. Pierce, Fl or email to sue@tigersfortomorrow.org. This non-profit organization is seeking two (2) possibly three (3) student interns for the 2006. Tigers For Tomorrow is a last stop exotic animal rescue preserve that houses and specialize in big cats. The preserve is in the beginning stages of moving to a new facility, interns will assist management in the move and care of the animals. **Responsibilities**: The intern will assist in the daily husbandry of preserve residents, assist in interpretive talks, work with the public. **Requirements**: Desirable qualifications include the ability to communicate effectively with people, writing skills, orientation to details, and be a self- motivator. Benefits include room and board, and $50.00 a week. Personnel transportation is required.

Big Cat Internship – Big Cat Rescue, Tampa, FL
For more information contact Scott Lope at (813) 323-5991 or email at catfoto1@aol.com. Four (4) positions available for ongoing three-month internships at TAOS-accredited non-profit big cat sanctuary. See www.bigcatrescue.org **Responsibilities**: Include, but are not limited to daily husbandry, exhibit cleaning, diet preparation, feeding, operant conditioning and behavior enrichment for the following species – lions, tigers, leopards, cougars, lynxes, servals, caracals, bobcats, lemurs and other exotic animals. We provide invaluable experience, on-site housing and utilities, safety training and educational materials. Advanced training and long-term employment opportunities exist for the right candidates. Many of our interns have advanced on to careers in the animal field. **Requirements**: Applicant must be willing to work six days a week, some holidays and follow strict safety guidelines. Hard work ethic and love of animals more important than degree.

More Zoo vacancies can be seen by visiting:

American Zoo and Aquarium Association - Job Listings
http://www.aza.org/JobListings/

American Association of Zoo Keepers – Jobs
http://www.aazk.org/animalKeepersForum/opportunity_knocks.php

European Association of Zoos and Aquaria – News then Vacancies
http://www.eaza.net

Australasian Society of Zoo Keeping (ASZK)
http://www.aszk.org.au/Zoo%20Positions%20Vacant.htm

Zoo Vets, Technicians and interns
http://www.aazv.org/job_openings.htm

Bird Jobs in the Field
http://www.birdingonthe.net/mailinglists/BJOB.html

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- ☐ **$65.00 or up** - *Individuals* **Contributing/Canada**
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Mail this application to: AAZK Administrative Offices, 3601 S.W. 29th, Suite 133 Topeka, KS 66614-2054. Make checks/money orders payable to AAZK, Inc. Must be in U. S. FUNDS ONLY. Membership includes a subscription to *Animal Keepers' Forum*. The membership card is good for free or discounted admission to many zoos and aquariums in the U.S. and Canada.

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AMERICAN ASSOCIATION of ZOO KEEPERS

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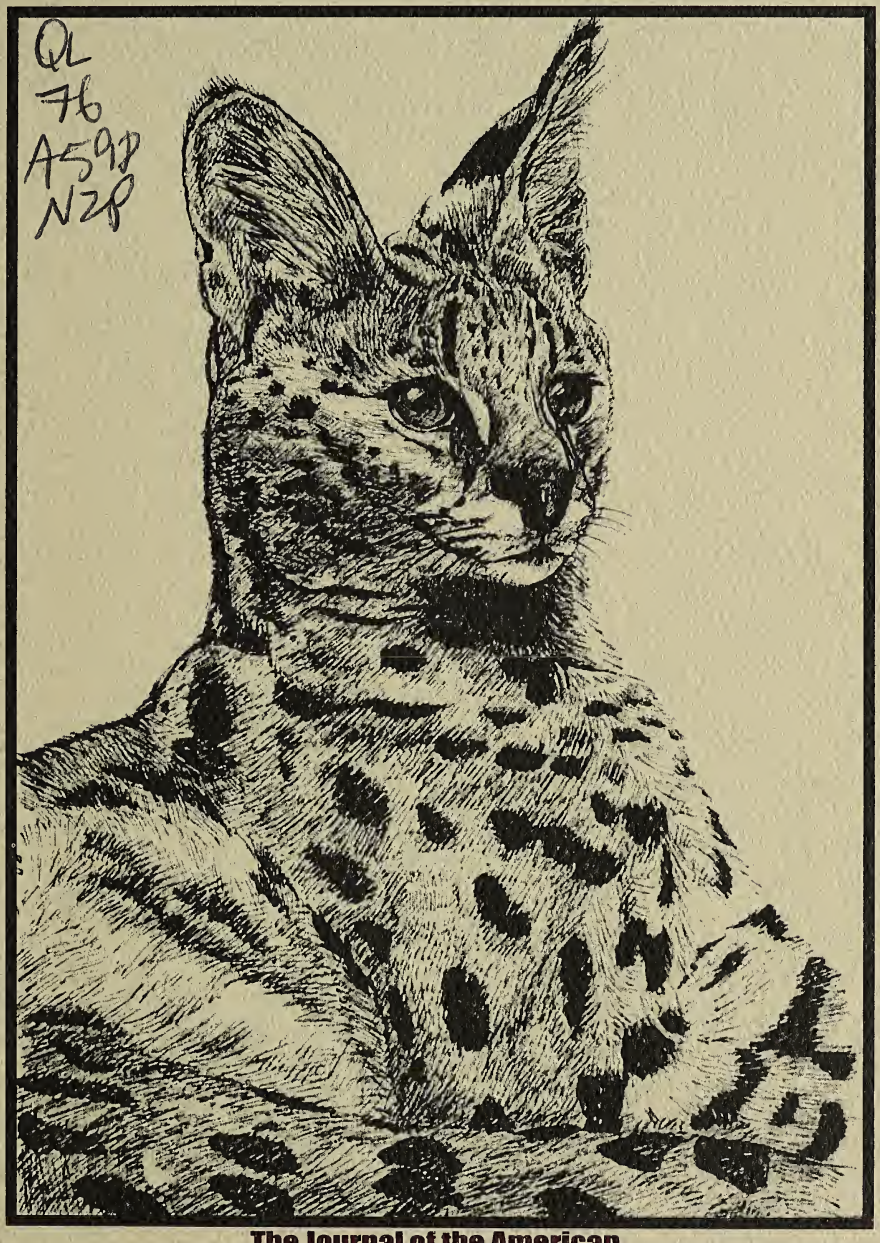

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Andy Henderson, Lincoln Park Zoo, Chicago, IL 60614-4712
Norah Farnham, Woodland Park Zoo, Seattle,WA 98103-5858

COMMITTEES/COORDINATORS

By-laws
Chair - Gisela A. Wiggins, North Carolina Zoo
Grants Committee
Chair - Shelly Roach, Columbus Zoo
Enrichment Committee
Co-Chairs - Dawn Neptune, Utah's Hogle Zoo and Amy Burgess, Disney's Animal Kingdom
Annual Conferences
Coordinator - Ed Hansen, AAZK, Inc.
Professional Development
Chair - Tammy Schmidt, St. Louis Zoo
International Outreach
VACANT
Interim Contact - Shane Good, Cleveland Metroparks Zoo

Ethics
Chair - Denise Wagner, Phoenix Zoo
Awards
Chair - Janet McCoy, The Oregon Zoo
Marketing Resources
Chair - Kristen Wolfe, Disney' s Animal Kingdom
Animal Training Committee
Co-Chairs - Angela Binney, Disney's Animal Kingdom & Kim Kezer, Zoo New England
Bowling for Rhinos -
Coordinator - Patty Pearthree, Cary, NC
IZC Coordinators
Shane Good, Cleveland Metroparks Zoo and Norah Farnham, Woodland Park Zoo

MEMBERSHIP SERVICES

ADT, EDT and ATD Forms
AAZK Administrative Offices/Topeka
AAZK Website - Liaison to Webmaster
Denise Wagner, The Phoenix Zoo and Kevin Shelton, Tampa, FL

AAZK Historian
Mark Levin, Plymouth Meeting, PA
AAZK Publications/Logo Products
AAZK Administrative Offices/Topeka

AAZK PUBLICATIONS - CONTINUING DATA COLLECTION

Resources for Crisis Management in Zoos & Other Animal Care Facilities, Vol. 2 - Susan D. Chan, Topeka, KS; William K. Baker, Little Rock Zoo, AR; Diana Guerrero, ArkAnimals, Big Bear Lake, CA

printed on Recycled Paper

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30th Anniversary
1974 - 2004

About the Cover.....

This month's cover features the Serval (Felis serval) drawn by Elena Chelysheva, a former Curator of Mammals at the Moscow Zoo in Russia. The Serval is one of seven species of small to medium-sized African cats. Found in many parts of Africa, but not in the equatorial jungles or the Sahara, they are most commonly found in East African savannas, usually near water. The Swahili name is "Makanu", but the word serval has its origin in the Portuguese word meaning "wolf-deer". It has a slender build with long legs and its back legs are longer than its front legs. It has a small head, large erect rounded ears and a long neck. This elusive and shy cat has a coat of yellowish tan with black spots, bands and stripes. The tails has black rings and its underside is white or light tan. The pattern of every Serval's coat is different – like the stripe pattern on a zebra. These noctural hunters prey on rodents, small ungulates, birds, lizards, frogs and insects using sight and sound more than scent to secure a meal. Servals will be found together in pairs only for a few days while mating occurs. A litter of 1 - 3 kittens are born in the summer months after a gestation period of 68-72 days. They are born in a lair; however, to protect them, the mother will move her offspring frequently to new hiding places. Like the cheetah, the mother raises her kittens alone and must leave them frequently to hunt. When the cubs are large enough to hunt, the mother will drive the males away from the family first. Females will stay together with the mother until they become sexually mature. Then they will be driven away by the mother so they can establish their own territories. The natural enemies of the Serval are hyenas, African wild dogs and leopards, although they are endangered due to trade in their beautiful fur. Thanks, Elena!

Animal Keepers' Forum publishes original papers and news items of interest to the animal keeping profession. Non-members are welcome to submit articles for consideration. Articles should be typed or hand-printed and double-spaced. Authors are encouraged to submit their manuscripts on a disk as well as in hard copy form. Manuscripts submitted either on disk or electronically as attachments to an email should be submitted in Microsoft WORD. All illustrations, graphs, charts and tables should be clearly marked, in final form and should fit in a page size **no greater than** 5.5" x 8.5" (14cm x 22cm). Literature used should be cited in the text (Brown, 1986) and alphabetically in the final bibliography. Avoid footnotes. Include scientific name (as per ISIS) the first time an animal name is used. Thereafter use common name. Use metric system for weights and measurements (standard equivalents may be noted in parenthesis). Use the continental dating system (day-month-year). Times should be listed as per the 24-hour clock (0800, 1630 hrs. etc.). Glossy black and white **or** color prints (minimum size 3" x 5" [8cm x 14cm]) are accepted. Clearly marked captions should accompany photos. Please list photo credit on back of photo. Photographs may be submitted electronically as either JPEG or TIFF file attachments.

Articles sent to *Animal Keepers' Forum* will be reviewed by the editorial staff for publication. Articles of a research or technical nature will be submitted to one or more of the zoo professionals who serve as referees for *AKF*. No commitment is made to the author, but an effort will be made to publish articles as soon as possible. Lengthy articles may be separated into monthly installments at the discretion of the editor. The editor reserves the right to edit material without consultation unless approval is requested in writing by the author. Materials submitted will not be returned unless accompanied by a stamped, self-addressed, appropriately-sized envelope. Telephone, fax or email contributions of late-breaking news or last-minute insertions are accepted as space allows. Phone 1-800-242-4519 (US); 1-800-468-1966 (Canada); FAX (785) 273-1980; email is akfeditor@zk.kscoxmail.com<

Deadline for each regular issue is the 10th of the preceding month.
Dedicated issues may have separate deadline dates and will be noted by the editor.

Articles printed do not necessarily reflect the opinions of the *AKF* staff or the American Association of Zoo Keepers, Inc. Publication does not indicate endorsement by the Association.

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E-Mail Addresses: You may reach Barbara Manspeaker at AAZK Administrative Offices at: aazkoffice@zk.kscoxmail.com< You may reach Susan Chan and *Animal Keepers' Forum* at: akfeditor@zk.kscoxmail.com<

AAZK website Address: www.aazk.org

BFR Website: http://aazkbfr.org

Scoops & Scuttlebutt

800#s Snafu Resolved

For those you who tried to reach us here at Adninistrative Office during the latter part of February and throughout March, our apologies if you continually got a busy signal. The long-distance carrier that we had been using for over six years declared bankruptcy and we had to have all our phone services switched over to anothr provider. Through some error (still a mystery) on their part, the 800#'s did not get transferred and thus whenever anyone tried to call them, they rang busy. Administrative Secretary Barb Manspeaker spent an inordinate amount of time navigating the maze of AT&T's electronic menus in trying to get this issue resolved. After finally reaching a "real person" for the second time, the problem was rectified. Again, our apologies for any inconvenience this may have caused the membership. You are welcome to use the 800#s to contact us with change of address information, to place an order, renew your membership or ask a question. However, please be aware that you can also do most of these things online at the AAZK website - www.aazk.org< We do have an answering machine on our phones and try to return all messages left within 24 hours. If you have difficulty reaching us by phone, you can always email Barbara or Susan at the email addresses listed below.

Barb Manspeaker - aazkoffice@zk.kscoxmail.com
Susan Chan - akfeditor@zk.kscoxmail.com
1-800-242-4519 (US) 1-800-468-1966 (Canada)

Seeking Missing Member

If anyone knows the whereabouts of Kristen Frizzell, we would appreciate you letting us know how we might be able to contact her. We have an Adopt-an-Acre certificate from the Center for Ecosystem Survival we would like to forward on to her, but do not have a current address. You can let us know via phone or email contacts listed above. Thanks!

***Gorilla Gazette* Available as E-Newsletter**

The April 2006 *Gorilla Gazette* has been finalized and the E-version was scheduled to be ready for distribution by mid-April. A limited supply of printed copies were to be be mailed to zoos and sanctuaries housing gorillas. If you have changed emails since subscribing in the past, please let Jane Dewar know so she can update her records. Anyone interested in subscribing to the GG should email her with thefollowing information: 1) Name; 2) Affiliation (ie: zoo keeper? researcher? student? fan?); 3) Mailing address and 4) Email address. The E-version (online) can be printed off in its entirety or by article, thus saving mailing and printing costs. - Jane Dewar, Publisher, *Gorilla Gazette*, email jdewar@gorilla-haven.org

The Amphibian Tree of Life Available Gratis

This bulletin, by authors Darrel R. Frost, Taran Grant, Juli· N Faivovich, Raoul H. Bain, Alexander Haas, Celio F. B. Haddad, Rafael O. De S·, Alan Channing, Mark Wilkinson, Stephen C. Donnellan, Christopher J. Raxworthy, Jonathan A. Campbell, Boris L. Blotto, Paul Moler, Robert C. Drewes, Ronald A. Nussbaum, John D. Lynch, David M. Green, and Ward C. Wheeler has been described as the most definitive work on the taxonomy of the Class Amphibia ever written. An essential work for the library of every herpetologist/biologist worldwide. *Bulletin of the American Museum of Natural History* 297: 1-370 (9.2 MGB pdf) - A copy of this article can be downloaded gratis by visiting the CNAH PDF Library at http://www.cnah.org/cnah_pdf.asp *Source: The Center for North American Herpetology, Lawrence, KS - 16 March 2006*

Have You Sent AO Your E-mail Address Yet?

In order to better communicate with our members, and also save the Association the rising costs of mailings/postage, we are working to establish an AAZK member e-mail database. With such a database we would be able to send out electronic membership renewal notices, information about upcoming conferences, and other Association news. In order to make this work, we need your help. Please send an e-mail to Barbara Manspeaker at aazkoffice@zk.kscoxmail.com with the words "AAZK Email Database" in the subject line. Please be assured that your e-mail address will not be shared with any other group or individual without your express permission. We are simply looking for ways to stay in touch with you as a member and to also help cut the costs of mailings and postage for the organization. Thanks in advance for helping us achieve this cost-cutting goal.

In Memorium

Marvin Jones

1928 - 2006

The zoo world lost a champion, a walking encyclopedia of animal knowledge and a good friend last month. On April 4th Marvin Jones, for many years the official registrar of animal collections for the Zoological Society of San Diego, died suddenly at the age of 77.

Marvin had a life-long interest in zoos and exotic animals dating back to 1944 when he worked as a volunteer at the Bronx Zoo in New York and the National Zoo in Washington, DC. In 1951 when he was drafted into the army and stationed in Germany, he began an odyssey visiting as many European zoos as he could. Because zoological records on animal collections were not well developed in that era, Marvin set about gathering statistical data on a variety of animal species – everything from longevity records to breeding information.

In 1956, Marvin became involved in AAZPA (now known as AZA), editing its member newsletter and serving on numerous committees. He also began publishing papers on the longevity of mammals in captivity and became one of the world's leading authorities on the subject.

"Marvin Jones began the very important work of documenting animal populations in zoos, their longevity and breeding records before this was commonly done," said Kurt Benirschke, MD, a past president of the Zoological Society of San Diego and founder of CRES – the Society's department of Conservation and Research for endangered Species. "Much of what we know about animals is because of his work, work that was largely done as an interested volunteer."

Marvin also had keen interest in the status of species in the wild and maintained extensive records on the wild (as well as the captive) status of orangutans, pygmy hippo, golden marmoset, snow leopard, and the ruffed lemur. He began what were to become the first Studbooks on these species.

Marvin became Registrar at San Diego in 1981 and served in that capacity until his retirement in 1993. In 1996, the San Diego Zoological Society awarded him the honorary title of Registrar Emeritus. Even in retirement, Marvin was active in working with zoos around the world as a consultant and an expert on animal data collection, longevity and zoological history.

Many of you who are new to the zoo keeping profession may not know the name Marvin Jones. For those of you who have been in the profession for some time, the name was a well-known one. He was always a friend to AAZK and had been a strong supporter of AAZK over the years. As *AKF* editor I had a number of occasions over the past 25 years to work with Marvin on stories—checking statistics, seeking opinions and advice. He and I only met in person twice, but our frequent phone conversations about AAZK, *AKF*, and the zoo world made me feel more like a friend. I happily recall the time during AAZK's 20th Anniversary conference in San Diego in 1987 when my husband and I were lucky enough to have Marvin on our double-decker bus tour around the San Diego Zoo. Not only did we receive lots of information, but were privy to the many fascinating animal stories Marvin shared with us. An indelible memory for me.

Marvin actually attended the very first National AAZK Conference in Topeka, KS presenting a paper on "Studbooks and Their Importance in the Modern Zoo World". Because of his strong support and encouragement of AAZK and its mission over the years, Marvin Jones was made a Lifetime Member in 1985.

We are not likely to see someone like Marvin Jones in the zoo world again. He was a one-of-a-kind individual whose passion and commitment for animals left a lasting legacy of information on which we will all continue to build the best in captive exotic animal care. "Dedicated to Professional Animal Care" – AAZK's motto and words by which Marvin Jones lived his life. We will miss him.

--Susan Chan, AKF Editor

From the Executive Director

The re-charter process for all AAZK Chapters is now complete. Thanks to all AAZK Chapters who completed this process in a timely manner. AAZK now has 86 chartered Chapters in our Association for 2006. In order to make sure that AAZK can effectively communicate with all of our Chapters, please make sure your electronic contact information (email address) is kept current with the Administrative Offices.

As part of this year's re-charter process, we offered AAZK Chapters the opportunity to underwrite a project or a Committee of the Association. Four AAZK Chapters took advantage of the naming opportunity and the following Committees or projects are now branded with the Chapter's name:

Animal Training Committee, Sponsored by the Tucson Chapter of AAZK ($100.00)

Institutional Membership Plaques, 2006 Production
Sponsored by the Phoenix Chapter of AAZK ($600.00)

International Outreach Committee, Sponsored by the Puget Sound Chapter of AAZK ($2500.00)

Professional Development Committee, Sponsored by the Greater Kansas City AAZK Chapter ($250.00)

The following AAZK Chapters elected to support the General Operating Fund of the Association:

AAZK Chapter of New Bedford	$ 25.00
AAZK Detroit Chapter	$ 200.00
Central Illinois AAZK Chapter	$ 100.00
Columbus Chapter of AAZK	$1000.00
El Paso del Norte Chapter of AAZK	$ 50.00
Georgia Chapter AAZK	$ 100.00
Greater Cincinnati Chapter AAZK	$ 200.00
Greater Cleveland Chapter of AAZK	$1000.00
Little Rock AAZK Chapter	$ 500.00
Orange County Chapter AAZK	$ 100.00
Portland Chapter AAZK	$ 600.00
Nashville AAZK Chapter	$ 300.00
Northern Lights Chapter of AAZK	$ 497.37
St. Louis AAZK Chapter	$ 50.00
San Antonio AAZK Chapter	$ 90.00
San Diego Chapter of AAZK	$ 250.00
Tulsa AAZK Chapter	$ 250.00
Western Michigan Chapter of AAZK	$ 100.00

The following AAZK Chapter elected to support the Conservation, Restoration and Preservation (CPR) Grant Award Fund:

Chesapeake AAZK Chapter	$ 750.00

These AAZK Chapters *split* their support between the Endowment Fund for the Association and the General Operating Fund:

AAZK of Cheyenne Mountain Zoo	$125.00	Endow
	$125.00	GOF
Point Defiance AAZK Chapter	$539.68	Endow
	$539.68	GOF
Snake River Chapter of AAZK	$ 50.00	Endow
	$ 50.00	GOF

The following Chapters also supported the special programs of AAZK for 2006. Please note that many AAZK Chapters supported multiple facets of AAZK:

Akron AAZK Chapter	$ 250.00	Katrina Relief Fund
Central Florida AAZK Chapter	$ 100.00	Katrina Relief Fund
Columbus Chapter AAZK	$3000.00	Katrina Relief Fund
Greater Baltimore AAZK Chapter	$ 250.00	Katrina Relief Fund
Greater Cleveland AAZK Chapter	$2500.00	Katrina Relief Fund
Knoxville AAZK Chapter	$1000.00	Katrina Relief Fund
Nashville AAZK Chapter	$ 87.90	Katrina Relief Fund
Point Defiance Chapter of AAZK	$ 250.00	Lewa School Lunch
Puget Sound Chapter of AAZK	$2000.00	Katrina Relief Fund
Rio Grande AAZK Chapter	$ 400.00	Katrina Relief Fund
Sacramento AAZK Chapter	$ 100.00	Katrina Relief Fund

As the result of our Chapter Underwriting Program and three plus months of soliciting AAZK Chapter donations, 32 AAZK Chapters (out of 84 chartered in 2005) have donated $21,977.63 directly to their Association and the projects supported by our membership. Of that amount, $12,089.73 will go directly to support the operation of your Association and keep your membership fees affordable and our projects moving forward.

This year, 27% of our Chapters directly supported AAZK through Chapter donations. If we can get this figure up to 100% participation, we can accomplish a number of important goals for our profession.

A very big thank you to our donating Chapters, we cannot continue without you.

Ed Hansen
AAZK Executive Director

Coming Events

The Callitrichid Behavioral Husbandry and Management Workshop - 13-14 May 2006.Hosted by the Houston Zoo and Moody Gardens, Houston and Galveston,TX This free workshop for those working with tamarins and marmosets will include formal presentations, posters, invited speakers and open discussion, covering a variety of topics such as husbandry, training, enrichment and conservation. For more information go to http://www.houstonzoo.org/Callitrichid

Tenth Elephant Ultrasound and Veterinary Procedures Workshop - 17-20 May, 2006 at Riddle's Elephant and Wildlife Sanctuary, Greenbriar, AR.For more information, or to request a registration packet, please see www.elephantsanctuary.org<

Third Protected Contact Training and Enrichment Workshop - 24-28 May 2006. Hosted by Zoo Atlanta, Atlanta, GA. Presented by Active Environments. Registration is limited to 25 participants. For further information contact: Active Environments, Inc., Tel: 805-737-3700; Fax - 805-737-3705; email - active_environs@ix.netcom.com<

2006 International Gorilla Workshop - 23-26 June 2006 at Paignton Zoo, Devon, England. Paignton Zoo will be host. We would like to invite gorilla workers from all diciplines to register. Further information available at http://www.paigntonzoo.org.uk/gorillas/gorillaworkshop.htm

AZAD Regional Conference #1 - 21-23 July, 2006 at Columbus Zoo & Aquarium, Powell,OH. Annual delegate meeting on 20 July. Conference capacity if 300 people. For info contact Joyce Talkowski, Co-chair, ohioregional@abc.net, or: Jim Bartos, Co-chair, jbartazad@columbus.rr.com; or see www.AZADocents.org

Association of Avian Veterinarians - 6-10 August 2006 in San Antonio, TX. For information please visit www.conferenceoffice.com/aav or you can email aav@conferenceoffice.com; phone (303) 756-8380

Turtle Survival Alliance 4th Annual Conference - 10-13 August 2006 in St. Louis, MO. Hosted by the St. Louis Zoo, this will be a joint conference with the IUCN Tortoise and Freshwater Turtle Specialist Group. More info available at http://www.turtlesurvival.org

The Association of Zoo Veterinary Technicians 26th Annual Conference - 8-11 September 2006 at the Toledo Zoo, Toledo, OH. If you would like more information please visit www.azvt.org or contact Debbie Paperd at the Toledo Zoo (419) 385-5721 ext. 2120.

AZAD Regional Conference # 2 - 15-17 September 2006 at Arizona-Sonora Desert Museum, Tucson, AZ. Conference capacity is 200 people. For info contact Marge Drugay, mdrugay@msn.com or see www.desertmuseum.org/azad

33rd AAZK National Conference – 15-20 September 2006. Hosted by the Lincoln Park Zoo AAZK Chapter and the Lincoln Park Zoo, Chicago, IL. See information at their website www.aazk2006.org≤

Animal Training Seminar - 18-22 September, 2006 at Shedd Aquarium, Chicago, IL. Five-day seminar on training techniques with Ken Ramirez. For more info and questions, contact Renee Birk at rbirk@sheddaquarium.org or call (312) 692-3328.

AAZV Annual Conference 20-24 September 2006 in Tampa, FL. For further informatin please visit http://www.aazv.org

AZA Annual Conference - 25-30 September 2006. Hosted by Busch Gardens, Florida Aquarium, & Lowry Park Zoo, Tampa, FL. See information at their website http://www.aza.org/ConfWork/AboutAnnualConf/#fut

Managing Animal Enrichment and Training - 7-13 October, 2006 in Portland, OR. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

27th Elephant Managers Association Conference - 15-18 October 2006,in Albuquerque, NM. Hosted by the Albuquerque Biological Park. Pre-conference trips are to the International Balloon Fiesta, 14-15 Oct; post-conference trip to Santa Fe and up the tram to the crest of the Sandia Mountains. For more information see www.elephant-managers.com , or call Lynn Tupa at 505-764-6216 or Gwen Dragoo at 505-764-6264.

Zoos and Aquariums Committing to Conservation 26-31 January 2007 – Hosted by the Houston Zoo, Houston, TX. ZACC is a bi-annual event that promotes the role of zoos and aquariums in supporting conservation activities worldwide, both at their institutions and in the field. Conference participants include representatives from zoological institutions, international conservation organizations, local non-governmental organizations, government agencies, funding agencies and, most importantly, field biologists and conservationists. Bringing together individuals from different countries and disciplines, ZACC conferences help to build a stronger and more effective global network for wildlife and habitat conservation, and to establish direct links to zoos, aquariums, and their constituencies. For more information you may contact zacc@houstonzoo.org or phone 713-533-6745.

International Conference on Environmental Enrichment - 5-10 August 2007. Hosted by Schönbrunn Zoo, Vienna, Austria.

Post Your Coming Events Here
email to: akfeditor@zk.kscoxmail.com

From the President

Congratulations to the Puget Sound of AAZK who has been selected to host the joint 2009 AAZK/ICZ conferences. Thirty-two of the Chapters voted to determine the host of this conference. The Board would have liked to have seen a higher percentage ofAAZK Chapters participating, but for those of you who did we thank you. Puget Sound will represent our association well as hosts of this international conference. An additional thank you goes to the other Chapters who bid on this conference. The Greater Houston, San Diego, and San Francisco Chapters also put together bids and each would have made a fine choice as well. Thanks one and all.

For those of you who spend any amount of time on the computer and have visited the AAZK website, you may have noticed some changes. The Board of Directors is trying to make the website more user-friendly, more dynamic, and certainly more useful to our membership. To that end we'd like your input on what you'd like to see on the website. We have added a feature to the home or splash page through which we can get breaking news to you.

Additionally, the job posting feature has been updated to include "real time" job postings. Postings are no longer done once a month so they will be timelier for you. We are looking at the addition of a Members' Only function as well, but logistics and money need to be scrutinized before that happens. A shopping cart feature is also being worked on so that you can purchase multiple items at one time rather than purchasing different items one at a time.

If there are any other things you would like to see on the website please contact me or any other Board member. Our email addresses are on the website. For those of you who haven't checked out the website recently please do so at: www.aazk.org.

Denise C. Wagner
President, AAZK Inc.

Amazon.com Users-- Don't Forget the AAZK Connection

Just a reminder that if you regularly (or even occasionally) purchase items on *amazon.com*, there is a way you can also help out the Association while you are doing your shopping. If you go to *amazon.com* from the AAZK Home Page (www.aazk.org), the Association will receive 5% of the cost of your purchase. The *amazon.com* icon is at the bottom right of the AAZK Home Page. And the percentage from purchase of goods is on all items you purchase there - books, music, etc. So next time you want to do a little online shopping at *amazon.com*, get there through the AAZK website and help out your professional organization.

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Bowling for Rhinos 2006

(Feel free to photocopy this form to submit to Patty Pearthree)

It's time to start planning for "Bowling For Rhinos 2006". Please send in your information ASAP. There is a $25 administrative fee for each event. Send check made out to AAZK, Inc. to Patty Pearthree, c/o BFR, 318 Montibello Dr., Cary, NC 27513. Remember, if you want to be eligible to win any of the trips being offered, all money must be sent to Patty Pearthree ***by 1 September 2006***, and you **must** be a national AAZK member in good standing to qualify. If bowling isn't your thing, try "Rock'n for Rhinos", "Run For Rhinos" or send a Chapter or individual donation. Every penny counts toward saving rhinos worldwide! Questions? (919) 678-0449 or ppear3@pear3.org website: http://aazkbfr.org

Please Print Clearly

Contact person:_____

Zoo/Organization:_____

Address:_____

City:_____ **State/Province:**_____ **Zip/Postal Code:**_____

Phone:

Day - _____ **Night -** _____

Fax:_____ **Email:**_____

Will you be hosting a Bowling for Rhinos Event this year?

YES **NO**

When? _____

Where?_____

How many Sponsor Forms do you anticipate needing? _____

Would you like sample letters/flyers/posters? **YES** **NO**

Mail to: *Patty Pearthree*
c/o Bowling for Rhinos
318 Montibello Dr.
Cary, NC 27513

Questions? **(919) 678-0449** **ppear3@pear3.org** **website: http://aazkbfr.org**

AAZK Announces New Members

Jenny Gordon, **Beardsley Zoo (CT)**; Jennifer Savianeso, **Jenkinson's Aquarium (NJ)**; Kimberly Constantine, **Cape May County Zoo (NJ)**; Theresa McCollister, Katie Freislich and Amy O'Dell, **New York State Zoo (NY**; Melissa Klegarth, **no zoo listed (W. Eaton, PA)**; Desiree Honeman and Paul Kalka, **Philadelphia Zoo (PA)**; Rebecca Malinsky and Katherine Volz, **Smithsonian's National Zoological Park (DC)**; Reddick Warren, Jessica Macauley, Katie Hunt and Lorin Milk, **Zoo Atlanta (GA)**; Katrina Smith, **no zoo listed (Gainesville, FL)**; David Quavillon, Amanda Clough and Ashley Salvatore, **Palm Beach Zoo (FL)**; Jill Cunningham, **Busch Gardens (FL)**; Jason Miles, **Birmingham Zoo (AL)**; Joy L. Carpenter, **Louisville Zoo (KY)**; Amber Gaggins, **no zoo listed (Wooster,OH)**; Kimberly L. Schaefer and Brian Baker, **Great Plains Zoo (SD)**; Jillian Huwe, **no zoo listed (Fargo, ND)**; Monica Kerschner, **Brookfield Zoo (IL)**; Candace Mueller, **St. Louis Zoo (MO)**; Jennifer Dais, **Oklahoma City Zoo (OK)**; Tricia Lang, **International Exotic Feline Sanctuary (TX)**; Larry Lemon and Scott Delony, **Abilene Zoo (TX)**; Amanda Knight, **Phoenix Zoo (AZ)**; Vikki McMillan, **Hollywood Animals (CA)**; Anne Holmes, **Sea World of San Diego (CA)**; Jillian Rawlins, **Oregon Primate Center (OR**; Derek Woodie, **Pt. Defiance Zoo & Aquarium (WA)**; Hannah Hamel, **Toronto Zoo (Ont., Canada)**.

Renewing Contributing Members
Hiroko Yoshida,Ph.D.
Okayama, Japan

Thomas C. Roy, Docent
Detroit Zoological Park, Royal Oak, MI

Ron Manseau, Docent
Detroit Zoological Park, Royal Oak, MI

Shirley Busch, Volunteer
San Diego Zoo, San Diego, CA

Renewing Institutional Members
John Ball Zoological Garden
Grand Rapids, MI
Bert Vescolani, Director

Cedar Cove Feline Conservation Park
Louisburg, KS
William D. Pottorff, Director

F. O. Wilson Zoo Library
Oklahoma City Zoo, Oklahoma City, OK
Norberto J. Castro, Director

Point Defiance Zoo & Aquarium
Tacoma, WA
Gary Geddes, Director

New Institutional Members
Amarillo Zoo
Amarillo, TX
Larry Offerdahl, Director Parks & Recreation

New Commercial Members
Emperor Aquatics, Inc.
Pottstown, PA

Conference '06 Update

As this article is being written, it is only five months, 12 days and approximately four hours till the start of the 2006 AAZK National Conference.

We from the Lincoln Park AAZK Chapter are anxiously waiting for our colleagues from all over to blow into the windy city in September.

We are thrilled and honored to announce that Brookfield Zoo will be hosting our Icebreaker on Friday, 15 September. Along with a meet-and-greet party from 6:00–10:00 p.m. at their Discovery Center, they will be providing behind-the-scenes tours starting around 1:00 p.m. and ending at 5:00 p.m., so plan on arriving early.

Registration will start at 8:00 a.m. on Friday, 15 September. Hotel check-in may not be available until 3:00 p.m., but the hotel will be able to hold your luggage during the day.

We are also pleased to announce our pre- and post-conference trips. The pre-conference trip will be to the Milwaukee Zoo on Thursday, 14 September —more details to follow soon. The post-conference trip, which will take place from 20-21 September, will travel to Wildlife Prairie Park, with a stopover at the Glen Oak Zoo in Peoria, IL. All facilities are excited to host these events. Please visit our website at www.aazk2006.org or contact Cruzanne Lewis at clewis@lpzoo.org for more details on these three destinations.

Our Chapter has had a great time the last several months being "zoo keepers on tour," going to and hosting a variety of fundraising events. We were at the Chicagoland Pet Expo selling magnets, ostrich eggs and paw prints to a variety of animal enthusiasts. We also had a murder mystery theater where attendees had to guess "who done it" from a cast of characters. We would like to thank Elliott Serrano for coming up with the idea and developing and directing the script.

We would also like to thank the Kansas City Chapter, New Orleans Chapter and Snake River Chapter for being among the first to enter the Chapter Challenge. We look forward to receiving more participants! If your AAZK Chapter contributes $250.00 or more to support the 2006 National AAZK Conference, they will be entered into a drawing with the winning AAZK Chapter receiving one full registration and one double occupancy room for five nights at the Millennium Knickerbocker Hotel (Sept. 15-19).

First it was Da Bulls, then Da Bears, in September it will be DA ZOO KEEPERS!

Kris Fraas

2006 AAZK National Chairperson
Lincoln Park AAZK Chapte

Dates to Remember

Abstract Deadline - May 15th
Completed Paper Deadline - July 1st
Chapter Challenge Deadline—August 1st
Hotel Reservation - August 14th
Registration Deadline - August 15th

Don't forget to go to www.aazk2006.org for updates and contact information. You can also register on-line there using PayPal® or print out registration forms.

Contacts:
Papers - mbrownpalsgrove@lpzoo.org *Exhibitors*- mperez@lpzoo.org
Chapter Challenge- mskidmore@lpzoo.org *Pre/post-conference trips* - clewis@lpzoo.org
Registration - dbernier@lpzoo.org *Everything else!* - kfraas@lpzoo.org

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Proceeds support the 2006 AAZK National Conference

Hosted by the Lincoln Park AAZK Chapter, Chicago, IL

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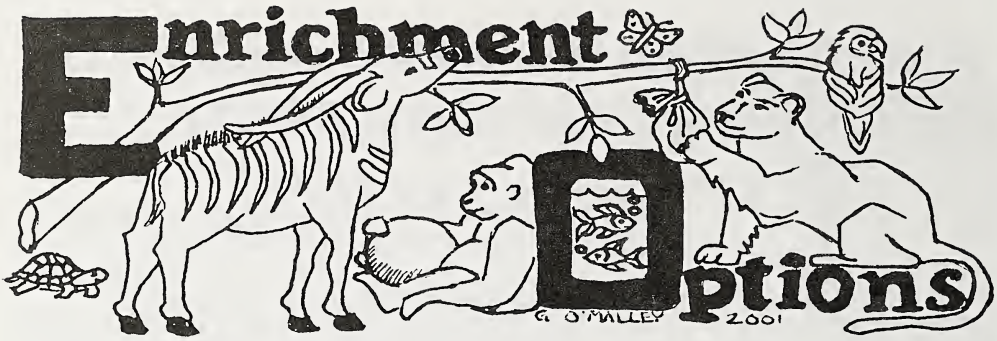
Lincoln Park Zoo, ATTN: AAZK—Marie Perez
P.O. Box 14903, Chicago, IL 60614



EO Editors - Dawn Neptune, Utah's Hogle Zoo
and Rachel Daneault, Disney's Animal Kingdom

Buoy Enrichment at Lincoln Park Zoo

By Amy Hanna, Keeper
Lincoln Park Zoo, Chicago,IL
All photos by Amy Hanna

Goals

The purpose of buoy enrichment is to provide mental and physical stimulation for captive animals. The main goal of this particular enrichment item was to promote the natural hunting and capturing behaviors of polar bears (*Ursus maritimus)*. A long, thin, heavy buoy was chosen because it "fights back" in the water, much like a weeble-wobble. It was a challenge for the two six-year-old sibling polar bears to capture and keep hold on to the oddly-shaped buoy, as well as to carry it out of the water (much like hunting a seal in the wild). Besides promoting natural behaviors, the buoy reduced stereotypic behaviors such as pacing because it kept their interest for hours at a time! Additionally, the buoy encouraged play behavior between the two siblings.

Obtaining Buoys

Contact the local beach and waterfront facilities in your area, or a large pool or boat supplies facility. Some questions to ask them are:

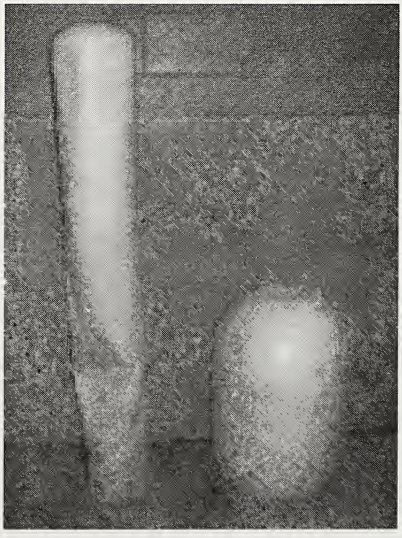
— Would you like to donate one or more buoy(s) for enrichment purposes at our zoo?

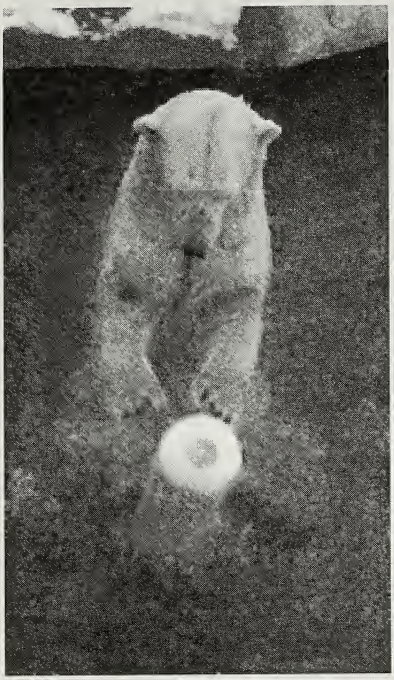
— How often does your facility discard buoys?

— What times of year are discarded buoys available?

In Chicago, the beaches on Lake Michigan close September 1st, and buoys are not available until October 15th. Warmer climates may have buoys available at different times during the year.

— What shapes and sizes are available?





Our polar bears enjoy a long, thin, heavy buoy with dimensions: height 5 ft., diameter 9 in., circumference 29 in., weight 65 lbs., with all the weight on one side. Rounder, lighter buoys may be better for other marine mammals, and smaller carnivores. Dimensions: height 31 in., diameter 18 in., circumference 58 in., weight 24 lbs., with weight dispersed evenly. (See Photo 1)

— What materials are your buoys made of?

Different species may need thicker, more durable plastics or polyethylene.

— Where was this buoy used? i.e., what was the condition of the water and how long was it there?

Your veterinarian may want to know the extent to which the buoy was used to decide how much disinfection is needed.

Preparing Buoys

Disinfection

Check with your veterinarian for disinfection protocols, as they may differ between institutions. Our vets came up with the following disinfection instructions, regardless of how the buoys were used: First, scrub with Industrial Orvus®, then rinse. Use a paint scraper to remove dried algae. Scrub and rinse with Orvus® a second time. Then apply diluted 1-Stroke® for ten minutes, and rinse thoroughly. Repeat the 1-Stroke® application three times, rinsing between applications. Let the buoys sit in the sun for three days, then disinfect again using 1-Stroke® or bleach three times as before. Put buoy in the sun for three more days.

Sticker/Paint Removal

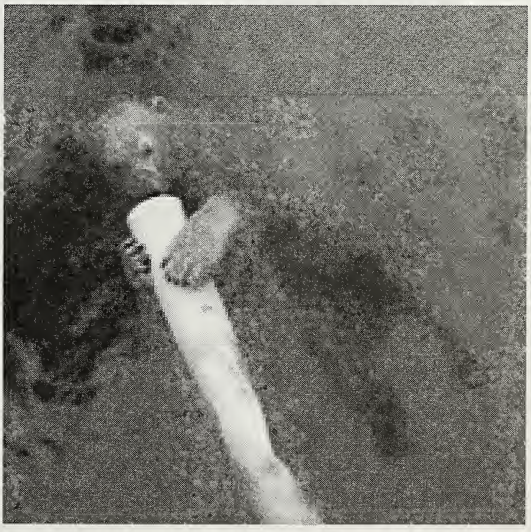
Buoys usually have some type of paint or stickers on them. A paint drier takes off the stickers quickly, but be careful not to burn the hard plastic of which the buoy is made. A hair drier works too, but is more time-consuming. Use a paint scraper in conjunction with either.

Naturalizing

The white buoy was not painted nor altered so that it would look like a natural piece of ice in the polar bear exhibit.

Implementation and Evaluation

The buoy was thrown into the pool while the polar bears were on land in their exhibit. This act initiated the polar bears' curiosity immediately. The male took advantage of it first. He played with it in the water, dragged it on land and threw it in the water again. He bounced on it, hugged it, bit it, stepped on it, rolled it, smelled it and it still floats in the water. (See photos.) The female played with the buoy in the water and on land once the male decided he had had enough.



In order to retain the enrichment value of the buoy, we advise using it about one day per month. However, due to its weight and odd shape, it may be difficult for a keeper to retrieve it from the water. You may need to wait for the bears to bring it on land. Depending on the type of buoy, there are ways to attach rope or chain to assist in retrieval. Our buoy stayed in the polar bear exhibit for three straight days, but luckily because of its shape and its movement in the water, it was difficult to capture and restrain. This resulted in a very challenging and lasting enrichment item. They were still playing with it for hours on end by the third day!

Documentation

We wrote in the daily keeper report when and for how long the buoy was used by the polar bears. Pictures were also taken. When we use the buoy again we will videotape the fun, and add it to our enrichment archives.

Re-evaluation

The buoy can be altered to increase its enrichment value. Some examples include, adding scent (e.g. fish juice or seal scent), food (e.g. peanut butter), or changing its location and movement (e.g. attaching it to an eyebolt, with or without a chain).

Always use your judgment when using buoys, as they may cause aggression between individuals. Perhaps one buoy for each individual at the same time can be considered.

(Ideas appearing in this column have not necessarily been tested by the editors for safety considerations. Always think ahead and use good judgement when trying new ideas. You are invited to submit material for the Enrichment Options Column. Look in the January 2004 issue of AKF for guidelines for articles acceptable for this column's format or contact the editor at akfeditor@zk.kscoxmail.com for a copy of the guidelines. Drawings and photos of enrichment are encouraged. Send to: AKF/Enrichment, 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054, USA. Eds.)

Flamingo Helpers

By Sara Hallager, Keeper
Smithsonian National Zoological Park
Washington, DC

In avian terminology, a helper is "a bird which assists in the nesting of an individual other than its own mate, or feeds or otherwise attends a bird of whatever age which is neither its mate nor its dependent offspring" (Skutch, 1961). In Caribbean flamingos (*Phoenicopterus ruber ruber*), instances of helping have been observed under captive circumstances at two North American zoological institutions. These occurrences are briefly reported here.

In captivity, the length in which juvenile flamingos are fed by their parents is often greatly extended and is likely achievable due to the plentiful and constant food supply and constant proximity of the chick to its parents. While Caribbean flamingos in the wild are capable of feeding themselves at 4-5 weeks (Sprunt, 1973), in captivity, feeding sometimes continues for as long as one year. Extended feeding up to one year has been reported at Slimbridge (Kear, 1973), Audubon Zoo (P. Shannon, pers. comm.) and at the Smithsonian National Zoological Park SNZP (pers. observation).

Physical evidence of extended feeding is manifested in the parent's faded plumage at the start of the breeding season. This light plumage indicates that the parent(s) fed the chick through the entire molt cycle (Shannon, 2000) and were subsequently unable to deposit pigments that would normally go into feather production.

One outcome of extended feeding in captivity has been a tolerance of the previous year's chick to the current year's chick to the point of allowing the yearling to help in the rearing (or partial rearing) of the pair's new chick. Two cases illustrate this phenomenon. The first event occurred in the late 1980's at the Audubon Zoo (P. Shannon, pers. comm.). Following the extended feeding of a pair's chick, the pair's yearling female offspring began feeding the pair's current chick approximately one week following hatching. As time passed, the yearling performed more and more of the feeding. The yearling continued to be fed by its mother even as it was feeding the chick. The male on the other hand, fed only the current year's chick.

The second case occurred in 2001 at the SNZP. Again, a pair's yearling offspring had been fed for an entire year as evidenced by the dam's faded plumage (although the normal, pink coloration of the sire indicated that he had ceased feeding the chick prior to his molt). Once the pair hatched a new chick, the yearling helped defend the nest of the current year's chick and generally remained in the proximity of the chick during the first two weeks following hatching. It was not however, observed feeding the chick.

Extended feeding of a juvenile does not appear to be a prerequisite, for a yearling to help in the rearing of a pair's current chick. This was documented at the Audubon Zoo in the late 1980's (P. Shannon, pers. comm.). In this case, an unrelated yearling male began assisting in the incubation of a nest of a pair about two weeks prior to hatch. Once the chick hatched, the yearling did the bulk of the feeding, although the chick's parents continued to feed their chick. The following year, the young male (now two years old) remained with the same pair and the group formed a trio. Both the two-year-old male and the adult male were seen copulating with the female. Following egg laying, the two-year-old helped with the incubation as well as the rearing of the chick.

Further investigation is warranted to determine the extent of this behavior in other species of flamingo, as well as to determine if the phenomenon occurs in the wild or is limited to captive situations.

Literature cited:

Kear, J. and Duplaix-Hall, N. 1975. Eds. Flamingos. T. & A.D. Poyser, Berkhamstead.

Shannon, P. 2000. Plumages and Molt Patterns in Captive Caribbean Flamingos. Journal of Waterbird Biology 23: 160-172.

Skutch, A. 1961. Helpers among birds. Condor 63: 198-226.

Sprunt, A. 1975. The Caribbean. Pages 65-74. *In* Kear, J. and Duplaix Hall, editors. 1975. Flamingos. T.& A.D. Poyser, Hertfordshire, United Kingdom.

Animal Training Committee Update

Submitted by Angela Binney[1] and Kim Kezer[2]
ATC Co-Chairs
[1]Disney's Animal Kingdom, [2]Zoo New England

This report will summarize Animal Training Committee (ATC) activities for 2005, as well as provide a preview of 2006 projects that are currently underway. In reflection, it appears that the 2005 theme for the ATC was 'organization and planning'. To summarize: the committee recruited a new member, designed a logo, adopted a mission statement, added a few articles to the *AKF* library, updated the ATC bibliography and prepared for the annual conference.

Deana Walz, of Utah's Hogle Zoo, joined the ATC in March of 2005. Deana is the Behavioral Enrichment Co-coordinator and Sr. Keeper for Utah's Hogle Zoo. She has brought fresh ideas to the committee and we have enjoyed working with her.

In addition to selecting an ATC member, we assisted in the search for two AAZK, Inc. members to help design a new animal training course. AAZK, Inc. was invited to partner with the Association of Zoos and Aquariums (AZA) to design a new course entitled, Animal Training Applications in Zoo and Aquarium Settings. This course, administered by Michelle Skurski (Zoological Manager of Behavioral Husbandry at Disney's Animal Kingdom), is one of 17 courses offered through the AZA Board of Regents (see www.aza.org for details on other courses offered). This five-day course will be held at Disney's Animal Kingdom and will include interactive classroom learning activities about concepts of animal training, as well as hands-on opportunities for participants to enhance their animal training skills. Dawn Neptune (Utah's Hogle Zoo), AAZK Enrichment Committee member, and Nicole Boyd (San Diego Zoo) were selected to represent AAZK, Inc. in this endeavor. It is slated to debut in early 2007.

The new logo, (see above), was designed by Dallas artist, Larry Parrigin. He was generous (and patient) enough to combine six peoples' input to make a header for ATC publications that can double as a letterhead! Thanks, Larry!

Every great endeavor starts with a vision, a purpose or a mission. Putting this into words helped us focus on our purpose and share this with others. So, to add to the organizational trend of 2005, the committee developed the following mission statement: *The AAZK Animal Training Committee strives to support the mission of AAZK, Inc. by providing information and learning opportunities for animal care professionals to facilitate the use of operant conditioning and other training techniques, to achieve behavioral management goals and excellence in animal care.*

Looking forward, the ATC is developing some new projects for 2006. Deana Walz, our newest committee member, initiated the latest project. She summarized survey results from the ATC Training Survey that was conducted in 2003. You may recall seeing this survey at your facility, as they were distributed to all AZA facilities. The goal of the survey was to census the existence and depth of training programs for species in AZA facilities. For each species trained, each respondent was asked to list trained behaviors, types of reinforcement and conditioned reinforcers used. Additional information was requested about facility design and training methods.

The data from this survey is being compiled into lists of behaviors for each taxonomic group. Each behavior listed will also show the percentage of respondents that have trained the behavior with the particular species indicated. These lists are intended to help determine appropriate and useful behaviors to train with each group. The first list compiled was the Mustelids, Procyonids, and Viverids group. It was submitted to Jan Reed Smith, of the small carnivore Taxonomic Advisory Group (TAG), to be included as an appendix in the Standardized Guidelines (SG's) for this group. Deana is compiling more lists, while the committee works to determine the best avenue for supplying this information to the zoo and aquarium community.

The committee is anticipating a fabulous time in the 'Windy City' with the Lincoln Park AAZK Chapter at the 2006 Conference! With the 2nd Call for Papers' currently underway (see www.aazk.org or the yellow insert in the April *AKF* for details), the time has already come to submit abstracts and iron out details. The focus of this year's ATC workshop will be 'training foundations', or the fundamental aspects of training. Keepers of all levels of experience will benefit from this workshop on animal training methodology and concepts. This session will provide keepers with tools to enhance animal management programs at their facilities. Keepers planning to attend the conference should also bring a few training or enrichment videos to share at the annual video night sponsored by the AAZK Enrichment and Animal Training Committees.

The year 2006 brings more change to the ATC. Beth Stark, the founding Chairperson of the ATC, has decided to resign her fulltime ATC member position (due to a very active schedule). However, she has graciously offered to stay on as a consultant and help with workshops. We value all of Beth's contributions to the ATC and greatly appreciate her input on our projects. With that said, we will need to find some fresh talent to join our force and help us fulfill our mission. If you think you are just the person for this position, please see the advertisement below for details.

We know that all of this organizing is a sign of great things to come! Check out future editions of *AKF* and www.aazk.org for committee resources and updates. We'd like to encourage everyone to 'keep up the good work' with your behavior management projects and to share some of your experiences (both successful and the 'not-so' successful) with your fellow AAZK members in the *Animal Keepers' Forum* and in Chicago. In the meantime, have a positively reinforcing year!

AAZK Animal Training Committee Seeks New Member! Applicants should be professional members of the American Association of Zoo Keepers, Inc. Desired qualities include: a demonstrated understanding of animal training techniques, including operant conditioning; several years of experience training animals, preferably in a zoological or aquarium setting; an ability to communicate effectively and to facilitate learning through writing, workshop development and implementation. Although it is not required, it is helpful if committee members are able to attend the annual conference to help facilitate workshops and attend meetings. This position will include active participation in projects, including writing and resource development. Institutional support or approval is not mandatory, but is helpful to both the new member and the committee. For more information about the Animal Training Committee visit www.aazk.org. Interested keepers should send a letter of intent and resume to Kim Kezer, committee co-chair, at the following email address: kim@kezer.net. Please use "ATC member applicant" as the subject to the e-mail. The deadline for application is 30 June, 2006.

Chapter News Notes

AAZK, Inc. is pleased to welcome a new Chapter to the Association. **Palm Beach Zoo AAZK** is located at the Palm Beach Zoo, 1301 Summit Blvd., West Palm Beach, FL 33405. Officers for this new Chapter are:

President.....Jennifer Loveless
Vice President.....Nathan Stentiford
Secretary.....Megan Deroisue
Treasurer.....Colleen Grabow
Chapter Liaison.....Jennifer Loveless

We wish them every success in their conservation and continuing education efforts.

Greater Cincinnati Chapter
The Greater Cincinnati Chapter announces their new officers for 2006:

President.....Dawn Strasser
Vice President.....Janet Crenshaw
Secretary.....Jay Williams
Treasurer.....Jenny Gainer

Knoxville AAZK Chapter
The Chapter is pleased to present its logo designed by a professdional artist who is an acquaintance of one of their members. The three animals - Bog Turtle, Red-railed Hawk and River Otter - were chosen because they are all native to eastern Tennessee and they are also part of the Knoxville Zoo's animal collection. The logo was adopted in 2004.

Little Rock Chapter Offers Final Sale on T-shirts/Sweatshirts

The Little Rock AAZK Chapter is offering for sale their remaining inventory of T-shirts and Sweatshirts featuring the old AAZK Rhino Logo. These are sure to become collector's items so if you are interested you are urged to email your request immediately as quantities and sizes are limited.

Colors and sizes of available inventory are shown at right. Email Charity Dawson (pachydermluvr@yahoo.com) with your request. She will advise you of its availability and process for ordering and payment. These shirts will be sold on a first come-first served

Sweatshirts - $10.00

Grey	**8-XXL and 6-M**
Navy	**5-XXL and 6-M**
Khaki	**8-XXL, 7-XL, 1-L, and 6-M**
Green	**8-XXL, 3-L, and 5-M**

T-Shirts - $ 5.00

Maroon	**8-XXL, 4-L, and 3-M**
Navy	**9-XXL, 1-XL, 2-L, and 6-M**
Khaki	**6-XXL, 2-XL, 2-L, 7-M, and 2-S**
Green	**6-XXL, 2-XL, 2-L, and 10-M**

REACTIONS

A Question and Answer Forum for the Zoo Professional on Crisis Management

By William K. Baker, Jr., Curator
Panthera Research, Maumelle, AR

Question
Do master plans play a part in facility safety? (Part II)

Comments
In the last column, I covered how design safety and design security factored into the master plan process. In keeping with this topic, I would like to continue on to the particulars of facility design and visitor management as they apply to staff safety, practical daily management and also potential public interaction.

Facility Design:

- Public approaches and exit routes to animal exhibits should be designed such that they don't create places where the public traffic flow becomes impassable. This is especially important at viewing areas such as overlooks and viewing windows. All too often I see newly opened exhibits where the facility has increased attendance (desirable) with a lot of excitement. Yet, at the same time, the viewing points and overlooks are placed inside of manmade structures that reduce traffic flow to a trickle (undesirable). Needless to say, in an emergency such as a visitor that requires medical treatment or a fire occurs, moving people calmly can present some definite challenges. The easiest way to work around this is to design viewing areas that can anticipate traffic flow, not just for the present, but for the future as the facility continues to grow over time.

- Another facet of the exhibit viewing process is insuring that the traffic flow is continuous. By that I mean, the foot traffic enters the viewing area from one side and exits out the other side. One of the worst repeat mistakes that I have observed is when you enter a covered viewing area that can accommodate say ten people and you have to turn and exit back the way you entered. This concept at times is referred to as a "viewing node" and it's a really bad idea. The viewing point is usually too small and the design requires that you exit back through the entrance against the traffic flow. Over the years, I have been forced into landscaping just to get out during a normal visit. Now imagine having to do this with a panicked group of visitors. It's problematic at best.

- All walkways should be designed and maintained to support ADA access for patrons with physical disabilities. The rise and fall of the sidewalks and paths should always be consistent with local and federal regulations as they apply to building codes in your area or region. Also, it is the responsibility of every facility to maintain the quality and integrity of footpaths to insure that access stays current with code and that no trip hazards occur over time due to subsidence.

- All walkways that support foot traffic should have the capability to be lit at night to provide access for afterhours emergencies, and also for the inevitable special events and fundraisers that most zoological facilities undertake. How you light your walkways is really up to the institution. I have seen footlights used with good effect and overhead light fixtures used effectively as well. Probably one of the best applications I have observed was a facility that used overhead solar powered fixtures that were on a sensor and came on automatically at dusk every day. Low maintenance, no wiring needed, and eco-friendly in concept and application.

- Exhibit designers seem to have real problems understanding drainage surrounding an exhibit. All too often the exhibit is flooded from the public areas, walking paths, and sidewalks during heavy rains. Always direct water flow away from the exhibit into storm drains and if at all possible, put the exhibit on slightly higher ground. One way to handle this is to place storm drains between the exhibit and the public area, then hide it with landscaping thereby eliminating potential slip hazards.

- Vehicle traffic and heavy equipment access needs to be given serious thought during the development process. Ideally, a facility should have a perimeter service road that can support not only staff traffic, but commercial vehicles as well for daily deliveries and construction access as your facility renovates structures or develops new exhibits or service points for the patron.

- Another important facet of vehicle access is for emergency vehicles such as fire, police, or responding medical units. Always plan to provide key road access points for these vehicles so that don't have to negotiate crowds during heavy foot traffic on weekends and holidays.

- The same truism about lighting applies here for roads as well. Your facility should have the means to light roadways not only for safety, but so that emergency responders can see where they are going at night as they travel to an event site.

- Are your future exhibits designed for keeper, service vehicle, and heavy equipment access? In other words, will the designer provide for long-term access to the exhibit itself, otherwise the staff would have serious problems getting into the exhibit area for landscaping and repairs? Never design an exhibit that isn't "keeper friendly". Once again, access points should have lighting.

- Does the exhibit area have adequate security to prevent public interaction with the animals? Secondary guardrails should be strong enough to prevent trespass and far enough from the primary containment caging to prevent reaching. Guardrails should also be placed at a 45-degree angle to discourage parents from placing their children on top of them, while at the same time this angle also happens to be extremely comfortable for visitors to lean on as they read graphics or animal watch. "Danger rails" can still be found in some zoos that have high volume traffic or consistent public-animal interaction problems. Holly bushes, palmettos, and cactus are nature's version of razor wire and do a great job of keeping the public where they belong.

- Heat and air units should be placed in a manner that they support easy access for contractors and maintenance personnel, while at the same time they aren't located in direct proximity to the animal exhibits. While most specimens will become acclimated to compressor noise over time, it's really not a desirable feature, especially if your facility is moving towards a zoogeographic theme and attempting to create an immersion experience for the visitor.

- The same can be said for electrical junction boxes and transformers. It's best if they are placed at ground level to provide ready access for maintenance and contractor personnel, especially in an emergency. This need not be a unsightly feature during the visitor experience. They can easily be hidden in key areas or adjacent to structures inside of kiosks.

- As I briefly touched on in last month's column, some thought should be given to where you place your visitor service points. Ideally it's desirable to place these at regular or strategic points within the facility. When considering locations, project what your visitor may anticipate as potential locations for your lost and found, security, and first aid stations. With that thought in mind, the best initial locations would always be at the entry and exit points for public services.

- Keeping with this theme, food courts and mobile vendors should be located to not only maximize profits, but also to not interfere with the flow of traffic. Another thought, don't place food vendors directly next to a carnivore exhibit, it falls in the really inappropriate category, it's just not fair to the animals.

Next Month: Do master plans play a part in facility safety? Part III

If you would like to submit a question for this column or have comments on previously published materials, please send them to AAZK, Inc., 3601 S.W. 29th St., Suite 133, Topeka, KS 66614 Attn: Reactions/AKF

(About the Author: Since 1985 Bill has been active in the fields of science, zoology, and wildlife management. His education and experience include a B.S. in wildlife management and post-graduate studies in zoology, Lab and Museum Assistant, Shoot Team Leader, ERT Member, Large Mammal Keeper, Senior Keeper, and Zoo Curator at various zoological facilities. His area of research is crisis management in zoological institutions, which draws upon practical experience and training as a Rescue Diver, Hunter Safety Instructor, NRA Firearms Instructor, and Red Cross CPR/First Aid Instructor. Away from work he operates Panthera Research, which is a research and consulting firm.)

Keeper's Alert - Assistance Sought

Trouble with mallards, pigeons, chipmunks or squirrels? Are abundant native species mooching meals?

Many of us experience the same problems. Native critters that find a free and easy meal while our collection animals are battling for their dinner. Maybe you have trouble with raccoons but have come up with a great feeder to keep mallards out of your flamingo's feed.

I am putting together a resource guide for exclusionary feeders for any species. If you have a feeder no matter how simple or complex, I would like to add your feeder to the guide. Please send photos, diagrams and descriptions or questions to Shilohwalkosak@aol.com

All submissions will be included and everyone who submits a feeder will receive a copy of the finished guide!

Someone out there might even know how to keep raccoons out! (but I doubt it)!

--Shiloh Walkosak, Reid Park Zoo, Tucson, AZ

An AAZK Conservation, Restoration, and Preservation Grant Project: Otters and Clean Water in East Africa, a Swahili Coloring Book

By Jan Reed-Smith
East African Otter Project and Columbus Zoo and Aquarium
jrsotter@iserv.net or jan.smith@columbuszoo.org

Wenyeji Wa Mtoni

Background

Generally speaking, most people do not know there are otters in Africa, including people who live there. There are four species to be exact. These are the Eurasian otter (*Lutra lutra*) found in restricted areas of North Africa, the Congo clawless otter (*Aonyx congicus*) believed to still be existing in central and western Africa, the African clawless otter (*Aonyx capensis*), and the spotted-necked otter (*Lutra maculicollis*). The latter two species have the widest distribution, at one time inhabiting most of the watersheds, lakes, and some coastal areas of sub-Saharan Africa

African clawless otter *(M. Ogada)*

Spotted-necked otter *(Reed-Smith)*

For the last 12 years the IUCN Otter Specialist Group has prioritized work on the endemic African otter species (the latter three) due to the general lack of understanding of their current distribution, threats to their continued survival, and dearth of basic information on their ecological requirements (outside of South Africa), and their behavior. To date, some research on the African otters has been conducted in southern Africa (e.g. Carugati et al. 1995, Perrin & D'Inzillo-Carranza 1999 & 2000 and others), a few studies have been conducted in eastern and western Africa (Proctor 1963, Lejeune 1989 & 1990, Kruuk and Goudswaard 1990, Ogada 2005), and informal surveys have been carried out to identify species' distribution (e.g. Baranga et al 1995, Chira & Reuther 1995, Angelici et al. 1999, Van Neer 2002).

Claus Reuther, late Chair of the IUCN OSG, Dr. Jan Nels, OSG Continental Coordinator for Africa, and Dr. Helene Jacques, OSG representative for French-speaking Africa began working to determine the current distribution of African otters in 2000 and 2001. This work is still ongoing but suffered a set back with the sudden death of Claus Reuther in December 2004. In early 2005 a small team headed by Dr. Tom Serfass of Frostburg State University was put together to begin assessing the status of otters in the east African countries. At this time the team consists of Dr. Serfass, Mordecai Ogada, Sadie Stevens, and me, with Dr. Nels serving in an advisory capacity. Sometime over the next few months we will be joined by several Kenyan and Tanzanian graduate students.

We conducted our first preliminary Kenya and Tanzania surveys in May 2005. During this time we identified a need for community outreach programs and educational tools. We set five priorities for this outreach component of our long-term work in East Africa.

1. Establish a uniform method of interviewing people living or working in areas where we expect to find otters.
2. Identify areas of human/otter conflicts.
3. Establish links with local governmental and NGO organizations already working in these areas. These organizations are identified as those responsible for ecosystem management, research, conservation, schools, and community development.
4. Create an outreach presentation explaining what we are doing, the otters and their biology (as it is currently understood), and the link between otters and healthy ecosystems.
5. Create an outreach program targeting children emphasizing the importance of clean water to people and animals.

Coloring book project – the beginning

In October of 2004 we received an AAZK CPR Grant for $1,000.00. This combined with funds from the Otter SSP and the Meyer-Reed Ecological Fund allowed us to print 2,500 copies of the Wenyeji Wa Mtoni (Mtoni village and water) coloring book. The drawings and storyline for the coloring book were done by Kenyans Mordecai and Arthur Ogada; the books were tested and then printed in Nairobi. The drawings and storyline target children between the ages of 7 and 12.

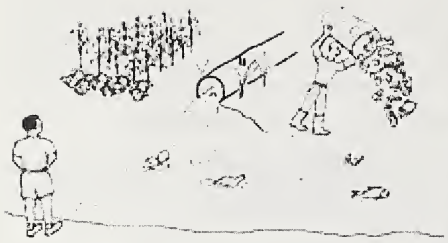
Our premise was simple, many of the schools we visited during our first survey were poor, lacking in basic supplies, and eager for materials and information of almost any kind. Advice given to us by local experts and others who have developed similar coloring book programs led us to believe that this would be an excellent introduction to the otter, and provide children with a meaningful keepsake.

The reality in East Africa is that riverine and lacustrine environments have been abused and polluted by the very people who gain the most from these vital resources. This, coupled with recurring droughts, threatens the survival of people and otters throughout the region. For this reason, it was decided we would emphasize the value of clean water for otters and people in the text of our coloring book. The translated storyline goes as follows:

1. This is Mtoni Village. It is a near a river called Mto Safi. The villagers get water from the river for washing and drinking. Some of the children also have fun fishing.

2. Mto Safi is the home of a very special animal called an otter. Have you ever seen one? You have to be very quiet and go down to the river early in the morning to see the otters. They can swim very well and they like eating fish and crabs. They like playing around in the river when there are no people around.

3. One day, the people in Mtoni started doing bad things. They were pouring sewage into Mto Safi, and then Mr. Takataka started throwing rubbish into the river. Mr. Mkulima also started cultivating the riverbank and planting vegetables up to the waters edge. All this made Mto Safi very dirty, and it became *mto chafu.*



4. Bad things started happening in Mtoni village. Mr. Takataka was thirsty and wanted a nice drink of water, but it was dirty and gave him a stomach ache! Mrs. Mkulima finished all her washing and all the clothes were still dirty because the water was brown! Mvuvi wanted to eat some fish for lunch so he went to the river to catch some but he only got a shoe and went hungry!! All the fish and crabs had died, so the otters also had nothing to eat. They had to go away to find food in another river, and they were very sad, because they liked living in Mto Safi.

5. Mr. Takataka felt bad and started burying his rubbish in a pit, and then the villagers made a septic tank and poured their sewage there. Mrs. Mkulima told Mr. Mkulima to stop farming on the riverbank, so he made a new vegetable farm behind his house.

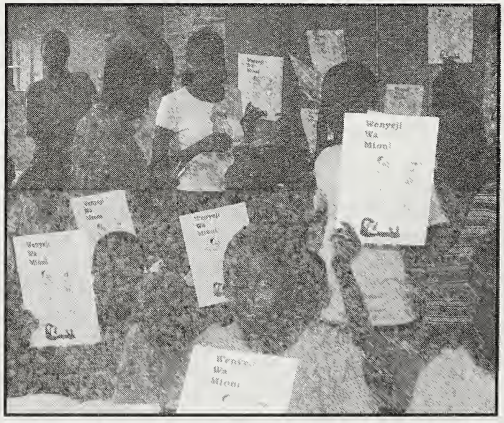
6. After some months Mvuvi started catching fish again, Mrs. Mkulima could wash her clothes clean and everybody was drinking nice clean water. The otters could also catch enough fish to eat and they were happy because they could come back and live in Mto Safi again!

Coloring book project – implementation

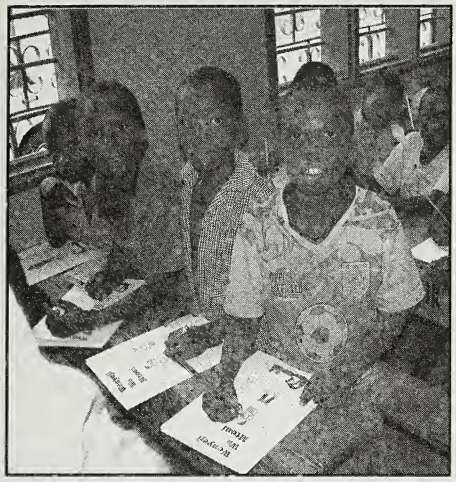
A second survey trip was planned for November/ December 2005 and it was decided we would spend a portion of the time field testing our outreach program before the full study begins in June 2006.

To prepare for this, I contacted a local elementary school to arrange a presentation on our otter study and school project to U.S. students. The Goodwillie Environmental School's 5th graders were excited about the project and volunteered to collect crayons, colored pencils, and other art supplies to be provided to the Kenyan school children along with the coloring book. The two large boxes of materials they collected provided us with the ability to fully implement the coloring book project and create a link between U.S. and Kenyan students. As an added bonus, the U.S. students wrote notes and drew pictures of their lives to be shared with students in Kenya. In return some of the Kenyan students were selected to draw pictures of their own to be returned to the U.S. kids.

In Kenya we selected the Kisumu Day High School and Primary School located on the shores of Lake Victoria for our first presentation. This school was chosen because one of their biology teachers, Peter Amunga, runs a Conservation Club and was interested in getting his students involved with our project.



The four days we spent in Kisumu with these students could not have been more rewarding.



Peter had notified some of his colleagues we would be visiting so the group was joined by students from Makasembo Secondary School (a poor school located 2 1/2 hours away) and from the Young Generation Orphanage which is in a very poor section of Kisumu. Our first day was spent in the classroom introducing the students to the otters, field work concepts, and the coloring book. Our second and third days were spent in the field showing students and teachers survey techniques, otter latrines, and OTTERS! For some of these kids it was their first time in a boat, first time to swim in the lake, and first time they could discuss environmental issues their community faces with practicing scientists.

As a result of our visit:

1. The Conservation Club students and teachers from Kisumu Day will be working with Mordy Ogada to monitor the otter population at Dunga Beach's Hippo Point near Kisumu.
2. The East African Otter team will be working with the fledgling community group at Dunga Beach that is hoping to begin restoring some of the natural papyrus and hippo grass vegetation.
3. The Conservation Club students from Makasembo and Kisumu Day schools will be developing a second coloring book focusing on the spotted-necked otter and lake ecosystems. When this book is funded we will be incorporating $250.00 for each club that can be used by them to develop additional conservation tools that they identify as their top priority.
4. Children at the Young Generation Center orphanage have given us a number of drawings that we will be selling for donations to the orphanage. In addition, we are working with them to find sponsors for students to attend secondary school. Our objective in this program is to create a positive relationship with these students and young conservationists for the future.

While this program is still in its infancy, our team is quite excited by the initial response to the Swahili otter coloring book. Our future plans include:

- Additional surveys of the Kenyan and Tanzanian watersheds to determine the distribution of African clawless and spotted-necked otters in this region.
- Long-term monitoring of selected otter populations in Kenya.
- Behavioral studies on the spotted-necked otters of Lake Victoria.
- The incorporation of Kenyan and Tanzanian graduate students into the project.
- Additional outreach efforts in communities where long-term studies will be conducted.
- School visits in all areas where otter populations are identified.
- Participation in community based conservation efforts.
- The assessment of spotted-necked otter populations and their use in some areas as eco-tourism attractions.

I will keep the AAZK members posted on our progress by presenting an update at the next National Conference.

In closing I would like to extend my thanks to AAZK for its contribution to the success of this program, to Frostburg State University which is the primary source of funds for this project, to the Meyer-Reed Ecological Fund for supporting the first field trip and contribution to the coloring book, and to the AZA Otter SSP for their initial support last year.

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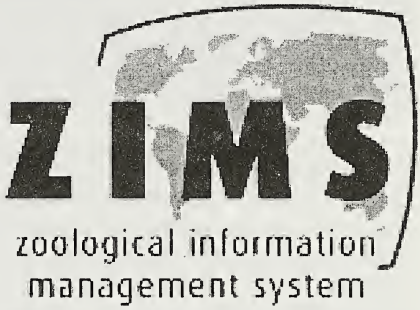
Times they are a-changing
ZIMS: What will it mean to you?

By Ross Snipp, British and Irish Association of Zoos and Aquariums and
Michelle Peters, International Species Information System

Reprinted from RATEL, the journal of the Association of British Wild Animal Keepers (ABWAK), Vol. 32, no 4, December 2005

Have you heard the news? ZIMS is coming. Beginning at the end of 2006, ISIS (International Species Information system) will replace the current suite of ISIS animal records software [ARKS, SPARKS and MedARKS] with a single database, the Zoological Information Management system (ZIMS). ZIMS represents the future of how we manage animal data at the local level – in our own zoos and aquariums, and globally. This is a major undertaking which, when it is complete, will represent many years of hard work by over 500 experts worldwide, including keepers, curators, record officers and vets.

The ZIMS vision is based on the principle of "one, global, accurate, comprehensive, real-time, specimen and collection information system developed by stakeholders and policy-makers throughout the world. This means there will be one global web-based ZIMS database, in which all ISIS members view and record their data. More importantly, each specimen will have one 'real-time' record in ZIMS. As changes occur in our zoos, so they will be reflected in the ZIMS database. Births and deaths will be recorded as they happen. An EEP (European Endangered species Programmes) Coordinator) [SSP® Coordinator in U.S.] can be instantly updated as changes occur in their regional population. No more waiting for annual updates. They will be able to make informed decisions based on accurate, real-time information. Every time they view their population in ZIMS, they will see a true reflection of the current status – the first time this has ever been possible.



For keepers this means no more waiting for ARKS reports to arrive, after the animal does. With ZIMS you will be able to view the complete life history of an animal before it even arrives at your zoo. Once it has arrived, all that your records officers need do is long on and report the arrival to ZIMS. No animal arriving from another ISIS member will need to be accessioned (their data will already be in ZIMS!), saving your records office plenty of time, and allowing you immediate access to begin recording information from the moment an animal arrives.

So, that's new arrivals taken care of. What about births and hatches? Unlike previous ISIS software, ZIMS will allow you to track specimens from pre-birth (eggs or pregnancy) through to the actual birth/hatch event and finally through post-death (PM results). ZIMS will truly represent the life history of any animal, keeping all staff up-to-date as the collection changes.

The current ISIS database represents in the region of two million specimens. ZIMS puts this information at your fingertips. Want to know what enrichment ideas have been tried for a particular

species? Which were successful or not? Just search ZIMS. Problems with diets? Don't know what to try next? Search ZIMS. Need to restrain a camel? What's the best method to use? Search ZIMS. Low reproductive success with your seahorses; suspect it could be the environmental parameters? Search ZIMS for the answer. ZIMS is a tool to directly help you, as keepers, manage the animals in your care. Find and share information with colleagues in over 700 zoos and aquariums worldwide.

ZIMS has been designed as a tool for all animal staff to use, including directors, curators, keepers and vets. Staff members can be assigned appropriate access to ZIMS, and will be able to enter and record relevant information. For keepers this could mean direct entry of your daily reports, making the information immediately available to others working on your section, and informing head keepers and curators simultaneously. Your hear keeper, curator, or records officer can then verify information before submitting it to ZIMS – providing the necessary checks and balances which are critical if ZIMS is to be an accurate comprehensive database.

***Editor's Note**: The following is an example of how ZIMS will work for keepers. It is taken from the ISIS website information on this program at www.isis.org.*

Keepers — ZIMS. What will YOURS do?

One of your lemurs is having an annual physical exam tomorrow. The vet needs the animal to remain in the night quarters until after the exam, and to have the evening food withheld. However, you will be away from the zoo for the next three days. How can ZIMS help?

ZIMS solution:

• You log onto ZIMS and see that the vet has scheduled the lemur's exam for 11:00 am tomorrow. He has noted his directions to keep the animal indoors and not fed until after the exam.

• You bring the lemur in for the night and note this in ZIMS. You also note that the animal last ate at 4:00 pm.

• The next day, your relief keeper logs into ZIMS. She notes that the lemur is not to go out on exhibit this morning or be fed until after the exam.

• When the vet has completed the exam, he enters his exam notes into ZIMS and marks the exam as complete.

• The relief keeper checks ZIMS at noon to assure the exam has taken place. She sees the vet's notes, feeds the lemur, restores its access to the exhibit and leaves her notes in ZIMS.

• Because you are particularly interested in finding out how things went with the lemur's exam, you access the Internet and log on to ZIMS. Your access allows you to see the notes from the vet and the relief keeper. You see that
everything has gone well.

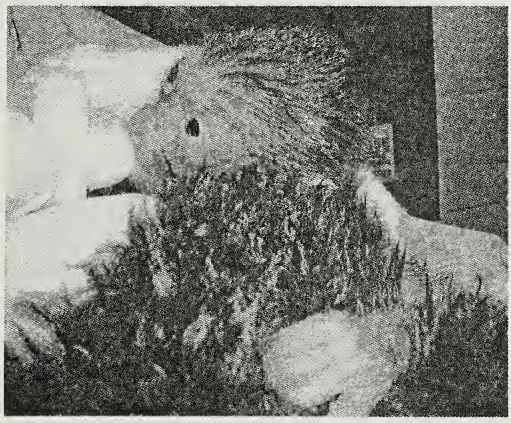
ZIMS will help you stay on top of things even when you are called away. With ZIMS, you can always rest assured that your animals are in good care and that you will not return to any big surprises. If you can access the Internet, you will be able to access your ZIMS. *Source: ISIS Website www.isis.org*

A Process for Successfully Reintroducing a Hand-Reared Infant Siamang (*Hylobates syndactyl*) to Its Parents

By Kelly Craddock, Small Mammal/Gorilla Keeper
Riverbanks Zoo and Garden, Columbia, SC

Abstract
The decision to hand-rear a primate is a never an easy one. The psychological impacts alone make this a daunting task. When Riverbanks Zoo in Columbia, SC was faced with the task of hand-rearing a premature siamang, the main goal was to reintroduce the infant to its parents. Reintroducing an infant requires teaching behaviors, not only to the parents, but also to the infant. There are many factors that contribute to the success or failure of a reintroduction. Reliability of the trained behaviors, adequate communication, and consistency among trainers are essential. The training process must also be a positive experience for the animals.

Introduction
On 28 November 2003, a premature female siamang was born at Riverbanks Zoo. The dam had apparently rejected her and the sire was carrying the infant. Possible hypotheses for the rejection include her being premature and the dam's pre-existing medical condition of dermatitis. The dam lacks hair on her stomach and chest so the infant may not have been able to cling to her to nurse. The offspring had to be removed from the parents in order to perform a medical assessment and to provide nourishment. Several attempts were made over the next couple of days following the infant's birth to reintroduce her to her mother, but these attempts were unsuccessful. Riverbanks staff decided to hand-rear the infant in hopes that she would be healthy and strong enough to be reintroduced to her parents. The sire was an experienced parent who had shown great care for his five previous offspring and with this infant before she was removed. However, the dam was an inexperienced parent and failed to exhibit any maternal behavior. Once the infant was stabilized, the goal was to reintroduce her to her parents by training the sire to bring her into the back up area for feedings to be administered by the keeper staff.



Picture 1: Siamang Infant Three Weeks Old
(photo by Dr. Tiffany Moore, DVM)

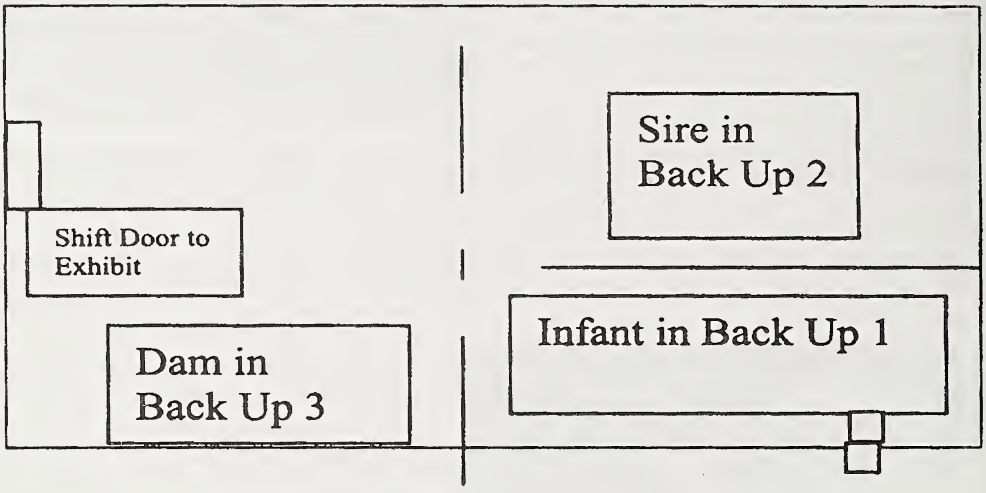
Training Process: Prase I
The training process began on 17 December by simply bringing the infant into the siamangs' back-up area. This allowed them to be exposed to each other and to interact. It was important for the infant and parents to have visual, olfactory, and tactile contact with each other through the mesh barrier. A week later, training began with the sire and dam. They were separated in the back up area during their training sessions due to aggression toward the sire and infant exhibited by the dam. The first step of the training process was to gradually move the infant to the mesh barrier without either parent displaying aggressive behavior towards the infant. The adults' hands were targeted above

their heads and they were rewarded for not grabbing the infant. The sire and dam were both very interested in the infant and the sire often licked her.

In order to be able to administer nourishment to the infant once she was reintroduced, a "space bottle" had to be constructed. A space bottle allows nourishment to be provided to the infant without any physical contact from the keeper. A nipple is attached to a tube, which is long enough to enter the back-up area through a hole in the mesh barrier to reach the infant, and the other end of the tube is connected to the bottle. The formula flows from the bottle through the tubing to the nipple. The veterinary staff at Riverbanks consulted with the staff at Disney's Animal Kingdom to develop the design of the space bottle.

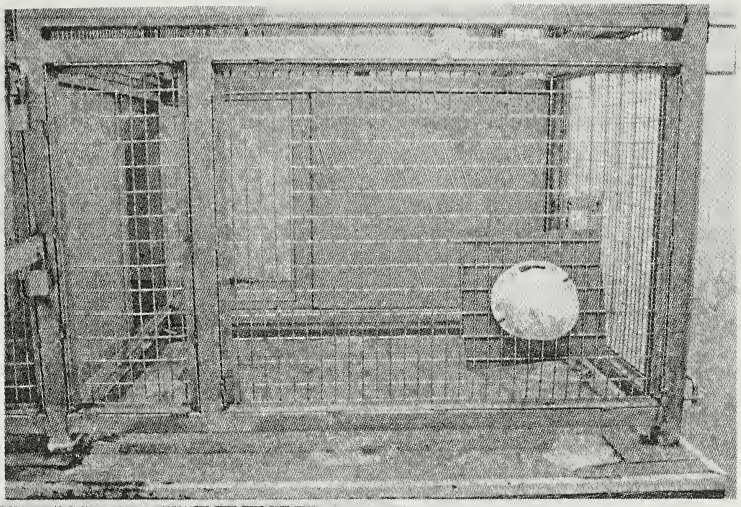
On 23 December, tubing was pushed through the mesh barrier towards the sire's abdomen while his hands were targeted above his head. This was the initial step to the space bottle training. A PVC port with a screw on cap was installed in the mesh barrier of the front small back up on 7 January. This allowed a nipple attached to the tubing to be placed inside the back-up once the cap was unscrewed from the port. The next day the adults started training to station in front of the port. The space bottle was slowly introduced to the siamangs, visually at first. Once they were comfortable with that step, it was slowly placed in the port and held there. The space bottle was also placed underneath the caging at varying distances from the animal. If the siamangs did not react to it, they were rewarded. Eventually each trainer, working at their own pace with each animal, was able to build up to the point where the siamangs would allow the space bottle to touch their abdomen.

Figure 1: Siamang Back-Up Area



On 1 February 2004, the infant was fed in the adults' back-up area for the first time. The parents were rewarded for coming into the back-up area when the infant was there and for remaining inside for the duration of the feeding. In addition, a training session followed every feeding so they were also rewarded for staying in the back-up area for the session. After 29 February, the infant was fed in the adults' back-up area at least two times a day.

The decision was made to reintroduce the infant when the sire's training with the space bottle and stationing at the port was reliable. After the 11:00 feeding on 9 March, the infant was reintroduced to her parents. The sire and dam were separated from each other in the back-ups. The dam was in back-up 3 and the sire was in the back-up 2. The infant was placed in back-up 1. The sire was given access to the infant. He immediately picked her up and was very careful with her. Attempts were made every half hour to get the sire to station with the infant at the port in order to feed her, however, the attempts were unsuccessful. The sire would come down and take food but would not remain stationed when presented with the space bottle. After 24 hours without the infant receiving nourishment, the sire had to be anesthetized and the infant was removed.



Picture 2: Siamang Back-Up Area *(photo by Kelly Craddock)*

Picture 3: Sire Stationed at the PVC Port *(photo by Kelly Craddock)*

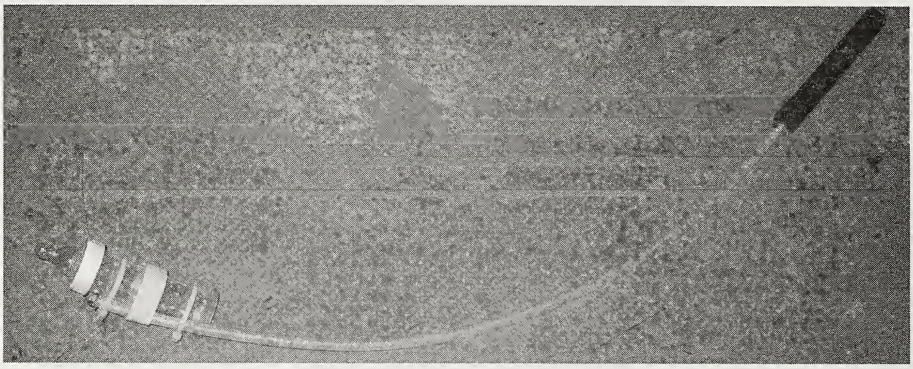
Although this reintroduction was not successful, it provided the keepers with valuable information on how to approach the next attempt. It was clear that more training was needed and that too many variables in the animals' daily management routine had been changed during the first reintroduction attempt. For example, the sire and dam had been separated from each other for an extended period of time and the sire had not been allowed access to the exhibit. Each of these actions may have caused increased stress. In addition, there was constantly a member of the animal management staff in the back-up hallway during this attempt. Although the siamangs could not see them, they were aware that people were present which is not normal for them. The success of the reintroduction was dependent on the sire and the dam trusting the keepers that nothing negative was going to occur when they brought the infant to the station for the feeding. Therefore, it was concluded that the animals' daily management routine should remain as consistent as possible during the next attempt in order to make them feel more comfortable and to decrease their anxiety.

Training Process: Phase II

Using the information acquired from the failed reintroduction attempt, training resumed with renewed vigor. Starting on 15 March, the infant was fed in the adults' back-up area once a day. By 24 March, the infant was being fed in the back-up area for every feeding using the space bottle. When the infant was taken to the back up for feedings on 29 March, the adults were locked out of the front, small back-up. The infant was then placed in the back-up so that she could be fed by the space bottle through the port. The infant was fed in this manner at every possible feeding.

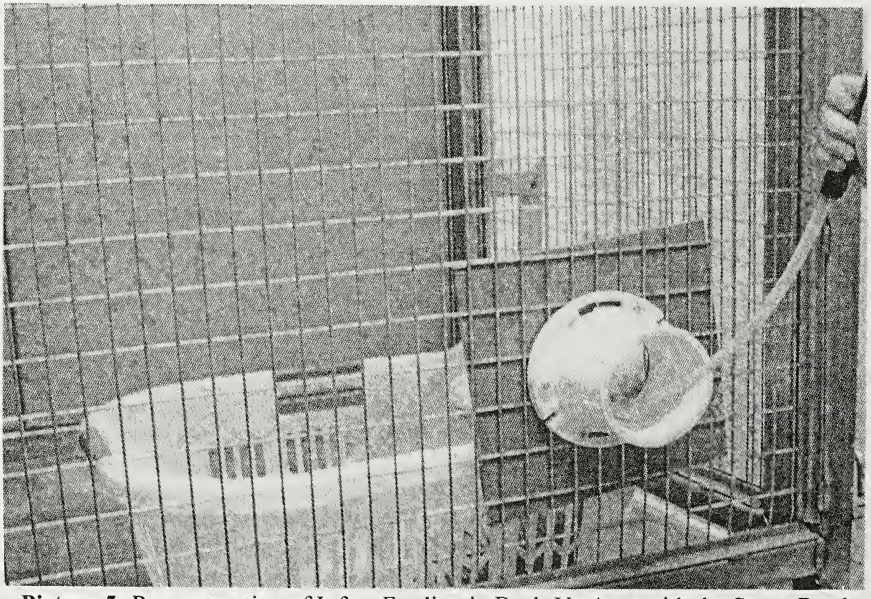
Since the sire proved to be uncomfortable with the space bottle during the reintroduction, the training had to regress to the initial steps as discussed previously. More steps were also added to the

training process. First, the sire and dam were required to station at the port. They were then be desensitized visually and tactilely to the space bottle. The space bottle would have to be able to touch them with no anxiety and for a duration of approximately five to ten minutes. Initially there was no formula in the space bottle during the training. Therefore, they also had to be desensitized to any formula that may leak from the nipple. The dam showed less anxiety towards the space bottle due to her high motivation for food. However, the sire was very adverse to any liquid dripping onto his stomach or chest. In April training began to desensitize him to the formula by dripping milk outside the back-up and eventually inside. The process of desensitizing the sire to the liquid caused some regression with the space bottle. Therefore, the design of the space bottle was modified so that a minimal amount of liquid actually dripped onto him by fastening the bottle to the end of the tube so that the formula came directly out of the bottle.



Picture 4: Space Bottle *(photo by Kelly Craddock)*

Another technique used to reduce the sire's regression with the space bottle training was to add a clicker as a bridge. On 8 May, clicker training began with the space bottle and the sire began to show progress. The training was variable to keep the siamangs interested. Training consisted of behaviors including stationing, targeting, basic husbandry behaviors, shifting, and the new reintroduction behaviors currently being trained.



Picture 5: Reconstruction of Infant Feeding in Back-Up Area with the Space Bottle *(photo by Kelly Craddock)*

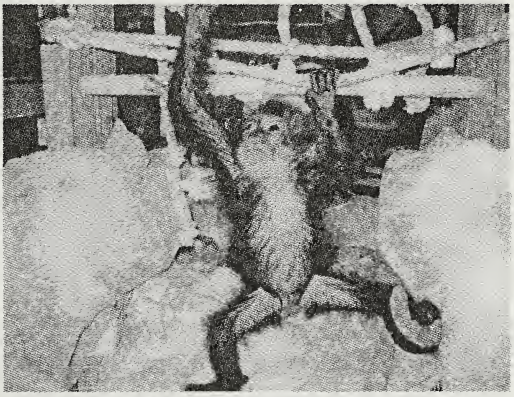
One of the most important elements in the training process was for the siamangs and trainers to develop and maintain a positive relationship. Communication about the progress of the training and consistency among the trainers was also essential. The number of trainers involved in the process was kept at a minimum. Five keepers were initially involved, and only three keepers were training the sire and dam during the last couple of weeks before the reintroduction. The training sessions were videotaped to ensure that everyone was consistent. Weekly meetings were held to discuss training progress.

Infant Training

Not only did the parents have to be trained, but so did the infant. She had to learn to locate the nipple on her own and to turn her body towards the port through which the nipple would be inserted. In addition to feeding behaviors, she also had to be able to cling to her parents and to move on her own.

In order to train the infant to locate the nipple, successive approximation was used by first placing the nipple right in front of her mouth and allowing her to come to it. At each feeding the nipple was moved further away from her mouth so she would have to maneuver more to locate it. This behavior was important because the nipple on the end of the space bottle would not always be able to go directly to her mouth. She may have had to move around on the sire to reach the nipple. When the infant was placed in the back-up to be offered the space bottle through the port, it allowed the keepers and her to adapt to the way the feeding was going to occur once she was on the sire. She learned the perspective of being fed through the mesh barrier and away from the caretaker. It was also beneficial for the adults to observe the feeding of the infant in the back-up area with the space bottle.

The infant's grip on her fleece surrogate, a piece of fleece wrapped around a pillow, had to be strong enough so that she would be able to hang onto her parents as they climbed and brachiated on the ropes of their exhibit. Therefore, her arm muscles had to be exercised. For the first couple of months of her life she would wrap her fingers around the keepers' forefingers and as the keepers would lift her off of her fleece she would pull herself up. In addition, as she was holding onto her fleece the keepers would swing the fleece in order to improve her grip. As the infant grew and her health improved, she was able to exercise for longer periods of time and was able to move around more on her own. A bar set was built so that she could grab onto the bars and pull up with her feet not touching the ground. The bars were at different heights so she could brachiate from one bar to the next. In addition, a rope course was constructed so she could walk while holding onto the rope above her. She also had a rope set that allowed her to brachiate and hang above the ground. These exercises greatly improved the muscle strength in her arms and legs and they were natural behaviors that she would be experiencing once she was returned to her parents. Her ability to move around, brachiate, and hang on her own was an indication to the keepers that she was prepared to be reintroduced to her parents. The infant began to also exhibit an increase in stereotypic behaviors such as hand chewing and head shaking. This was another sign to the keepers that it was time to attempt another reintroduction.



Picture 6: Infant Brachiating on Rope Course
(photo by Aimee Meyer)

Reintroduction Training

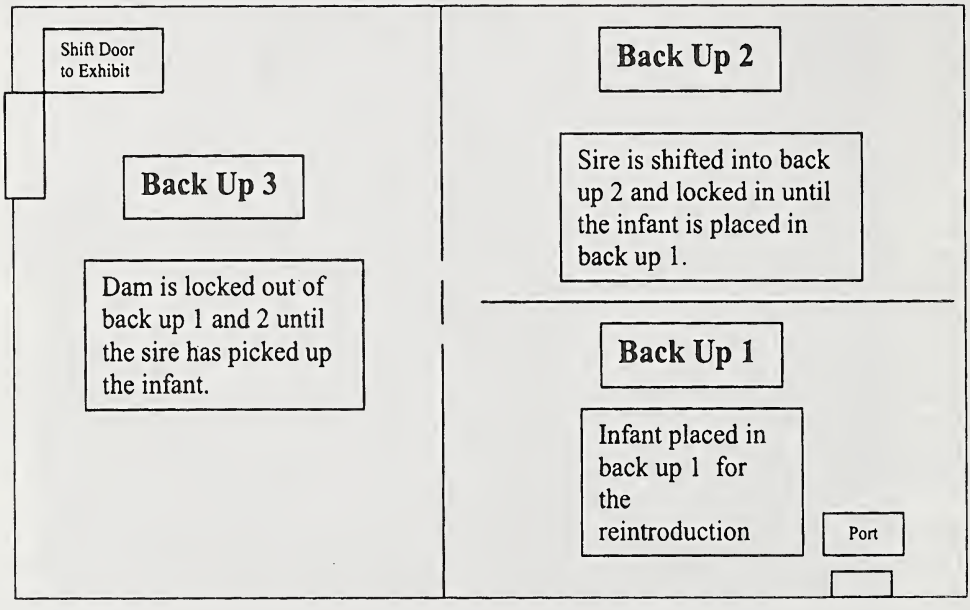
The behavioral team decided that one week of one hundred percent compliance was necessary before a second reintroduction could be attempted. This meant that the sire would have to station in front of the port and allow the space bottle to touch his abdomen for at least five minutes at every designated feeding time.

The reintroduction was scheduled to take place after the 19:00 feeding on 22 June. The decision was made to reintroduce the infant at the 19:00 feeding because there would be no guests in the park and the siamangs would be able to have the entire night to be alone. The sire was trained to shift throughout the back-ups so he was accustomed to following the keepers from one holding area to another. During the reintroduction training he was shifted into bac- up 2 behind the enclosure in which the training sessions usually occurred and rewarded for compliance. When he was comfortable with shifting into the enclosure, the keepers began to touch the shift door that separated the two back-ups from each other. When the sire exhibited no anxiety with this step, the keepers began to slowly work on shutting the door. When the door was shut, he was rewarded, and the door was immediately reopened. Over several sessions, the period of time that the door was shut with the sire showing no anxiety was increased. Eventually the keeper was able to approach the door of the front back-up, jiggle the lock and then unlock the sire's back-up and let him into the front back-up with no signs of anxiety. These behaviors were important to train in order to decrease the stress of the reintroduction.

Plan for Reintroducyion

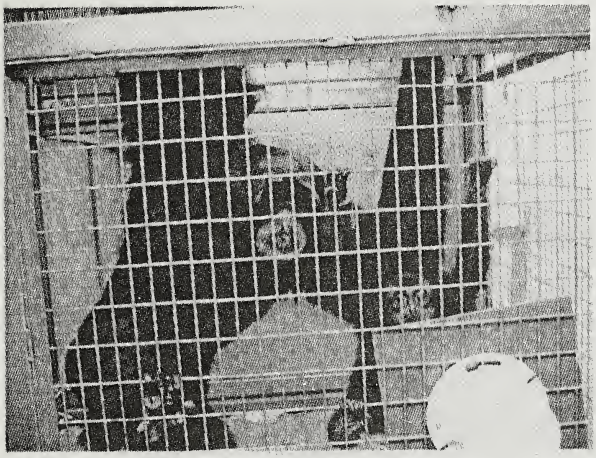
The keepers wanted every element of the 19:00 feeding the night of the reintroduction to be as consistent as possible. Therefore, the infant was fed in back-up 1, as usual. The steps following the feeding depended on which parent first entered the back-up for training. If the dam entered first, she would have a normal training session. When her session was over the shift door would be opened so she could exit the cage and the sire could enter. He would then have a shortened version of a training session with the space bottle. Then he would be shifted to back-up 2, as rehearsed in previous training sessions. The shift door between the two small cages would be shut and locked and the infant would be placed on a towel in the front back-up. Once the sire picked up the baby, the shift door between the small and large back-ups would be opened. The interaction between the adults would be observed and the keeper would leave if everything appeared fine. If the sire entered first for training after the feeding, then the process described above would be the same except the dam would not have a training session after the introduction.

Figure 2: Siamang Reintroduction Plan



After the Reintroduction

The sire entered the back-up area first for training. After he was given access to the infant, he smelled her and then immediately picked her up and carried her out onto the exhibit. An attempt was made to get the siamangs to come into the back-up area for the 23:00 feeding, however, it was raining and they did not come in. They were not disturbed until the 07:00 feeding the next morning. The sire came into the back-ups with the infant and stationed at the port. He turned his back away from the port and would not turn around so the nipple could reach the infant. Since the keepers wanted to keep their daily routine the same, the back-ups were cleaned by one of the keepers. The siamangs came into the back-ups with the infant and the sire allowed one of the keepers to hand-feed her several grapes and bananas. At the 11:00 feeding, the sire stationed at the port with the infant and she grabbed onto the caging. Therefore, the keeper was able to take the bottle and put the nipple directly through the caging without the use of the port or space bottle. The sire stayed stationed, without anxiety, the entire time that the infant drank her formula. He was rewarded throughout the feeding. This method of feeding came as a complete surprise to the keepers as the use of the port and space bottle was unnecessary. However, the training process leading up to this point was essential to ensure that the sire would bring the infant to the station at designated feeding times. The second day after the introduction the dam was observed with the infant. No aggression was observed as they transferred the infant back and forth. It was equally important that the dam was also trained to come in and station at the feeding times because the infant appeared to be taken care of by both parents. Currently the infant is becoming more independent and she can climb along the cage work to the station, by herself, if the siamangs are in the back-ups.



Picture 7: Infant and Sire stationed at PVC port *(Photo by Kelly Craddock)*

Traning Obstacles

The reintroduction of the infant to her parents was a success. However, there were several setbacks and obstacles that had to be overcome to reach that point. In February of 2004 the infant had a severe case of pneumonia and was extremely ill. Her illness put training and the reintroduction on hold.

Another obstacle was that the adults would not come into the back-ups when it was raining. Therefore, it was futile to train in these conditions. There was some concern about whether or not the parents would bring the infant in for a feeding if it was raining. For the first few weeks this was a problem so the keepers would feed her right after the rain stopped if she missed a feeding. However, after the first couple of weeks the parents began to bring her in regardless of the weather.

Picture 8: Infant feeding after the reintroduction *(Photo by Kelly Craddock)*

Conclusion

The infant is still physically small for her age and at least eight weeks behind developmentally because she was premature. However, she is thriving and eating extremely well. Before her reintroduction the keeper staff was concerned with the infant's underdeveloped motor skills, as she was not able to pick up food on her own. However, over the past year she has learned to pick up and eat solid food and she is now completely weaned from the formula. The parents are teaching her to be more mobile and other natural siamang behaviors. She is now frequently seen brachiating from the ropes on the siamangs' exhibit. For the first couple of weeks after the reintroduction the infant would vocalize whenever the keepers would leave after a feeding but she now recognizes the adults as her caregivers. Her stereotypic behaviors are still present, but they are greatly decreased. Only occasionally is she observed chewing on her hands and when she was first reintroduced, sucking on the sire's throat sac.

Deciding to hand-rear a primate is never an easy decision to make. However, being able to successfully reintroduce the infant to its parents is an amazing feat. Riverbanks Zoo took on the challenge of hand-rearing a premature siamang in hopes of one day reintroducing her to her parents. Through hard work and dedication, that goal was achieved. The result is a siamang infant that continues to thrive each day that she experiences with her parents.

Picture 9: Sire and Infant Sunning on Exhibit *(Photo byDr. Tiffany Moore, DVM)*

Acknowledgements

A very special thank you to everyone at Riverbanks Zoo who helped make this reintroduction a success. Thank you very much to the veterinary and mammal staff at Disney's Animal Kingdom, the Chaffee Zoo in Fresno, CA, and the nursery and mammal staff at Columbus Zoo and Aquarium for their consultations regarding the infant and the reintroduction.

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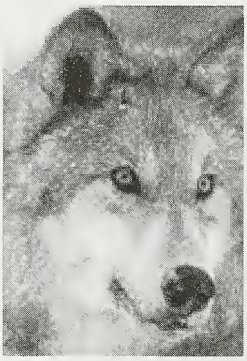
Legislative/Conservation Update

Compiled by Georgann Johnston
Legislative Advisor
Sacramento, CA

Interior Dept. Claims Gray Wolves Recovered from Extinction

Interior Secretary Gale Norton announced in March 2006 that gray wolves in Minnesota, Wisconsin and Michigan have recovered from the threat of extinction, prompting the U.S. Fish and Wildlife Service to propose removing the wolves in this region from the federal list of threatened and endangered species. "We commend our partners – states, tribes, conservation organizations, and local residents – for their dedicated efforts to ensure the wolf is an enduring part of the landscape in the Upper Midwest," said Norton. "Our proposal to delist the gray wolf indicates our confidence that those who will assume management of the species will safeguard its long-term survival."

The Service's proposal to remove the gray wolf from the list of threatened and endangered species applies to the Western Great Lakes Distinct Population Segment (DPS). This area includes the states above plus portions of six other contiguous states. Within this area, the Service is proposing to remove federal ESA regulation regarding the gray wolf and entrust wolf management responsibility with states and tribes.



The population of wolves included in this DPS no longer meets the definition of threatened or endangered under the ESA. The threats to the population in Minnesota, Wisconsin and Michigan have been reduced or eliminated as evidenced by the current status of the population, where wolf numbers have exceeded the numerical recovery criteria established in its recovery plan. The gray wolf population in the western Great Lakes region now numbers close to 4,000 animals, thereby exceeding the population criteria identified in the recovery plans.

The Service's proposal comes after court rulings which overturned a 2003 final rule that reclassified wolves in most of the lower 48 states from endangered to threatened and established three distinct population segments of the gray wolf. The rulings also invalidated a 2004 proposal to delist the gray wolf in the eastern United States. The current proposal replaces the previous actions with a much smaller Western Great Lakes DPS – a DPS that is narrowly structured around the core areas where wolves have exceeded their recovery goals since 1999 and the locations in which wolves have dispersed from the core areas.

More information on gray wolf recovery and the Service's proposal to delist gray wolves in the Western Great Lakes DPS can be found at http://www.fws.gov/midwest/wolf. *Source: USFWS Press Release 16 March 2006*

Polar Bears Considered for ESA Listing as Endangered

In February 2005 the USFWS was petitioned to list the polar bear (*Ursus maritimus)* as threatened and to designate critical habitat. The petition contained detailed information on the natural history and biology of the polar bear and on the current status and distribution of and perceived threats to the species. The petitioner submitted additional information in a letter received in December 2005, to be considered along with the information in the initial petition. Now, the USFWS has announced that the petition contains substantial scientific and commercial information indicating that listing the polar bear may be warranted. As a result, the agency is initiating a status review of the polar bear to determine if the species should be proposed for listing.

Currently, the Service is in the process of gathering additional information regarding this species, including: information on population distribution, density and trends, taxonomy, food habits and habitat selection (especially denning habitat); information on the short and long-term effects of climate change and sea ice change on the distribution and abundance of polar bears and their principal prey; information on the effects of other potential threats to the species, including oil and gas

development, contaminants, hunting and poaching; and information concerning whether any populations of the species may qualify as distinct population segments.

At the conclusion of the status review, a finding will be published announcing the Service's determination. If the listing is believed to be warranted, the Service will publish a proposed rule to list the species at the end of the 12-month process, unless the action is precluded by the need to undertake higher priority actions on other species. *Source: USFWS Press Release 8 February 2006*

Kitty Litter Imperils Sea Otters

A parasite often found in cat feces, *toxoplasma gondii*, has also been found in a high percentage of dead sea otters (*Enhydra lutris*) washed up on the coast of California. Between 1998 and 2004, 52% of dead sea otters and 38% of live sea otters were infected with the parasite. In 17% of dead otters, the parasite was the primary cause of death. Now, scientists are calling for a ban on "flushable" cat litter – claiming that it may contribute to the presence of the parasite in the coastal waters of North America.

The parasite's egg-like stage is extremely tough and may survive sewage treatment plants. This means when treated sewage makes its way to the ocean, it may be laden with the harmful parasitic hitchhiker. However, this is not the only path the parasite can take to the ocean – since even feral and outdoor domestic cats may contribute to the problem when their feces washed into the ocean via storm drains or surface water. *Source: Sacramento Bee Newspaper 2 April 2006*

Smuggled Birds Taste Freedom Again

In September 2005, border police in Namibia confiscated a large number of Ruppell's Parrots (*Poicephalus rueppelli*) from a smuggler near the Namibia-Angola border. Now, 66 of those birds have been rehabilitated and released back into the wild. All the birds have been banded for later identification.

The smuggler, who evaded arrest and fled back into Angola, had crammed the parrots into a small wire cage and the birds were in poor condition when the police confiscated them. The birds were kept in quarantine for a number of weeks and treated for injuries, parasites and malnutrition. *Source: PsittaScene; publication of the World Parrot Trust, February 2006*

Uganda's Effort to Curb Ivory Trade Receives Boost

Uganda has received three ivory detectors worth $3500 (US) each from the Lusaka Agreement Task Force (LATF) to curb the illicit trade of ivory. Adan Alio, a LATF field officer, said the detectors will be used to fight illegal trade in animals and plants. "With the new technology, illegal traders conceal fauna and flora in various forms in and out of Africa," Alio said. Receiving the equipment in Kampala recently, state minister for tourism Jovino Akaki thanked LATF for the donation, saying it will boost tourism. The detectors will be deployed countrywide.

LATF aims at conducting cross-border law enforcement and helps to build capacity among national bureaus through training and providing necessary equipment. *Source: The New Vision News 28 March 2006*

Concern About Kenyan Wildlife Exported to Thailand

A global conservation organization has expressed fear for the safety of Kenyan wildlife to be exported to Thailand. The Worldwide Fund for Nature (WWF) says it was still not clear whether the animals would actually go to an animal sanctuary or to zoos and called for openness in the controversial deal to allay fears that the animals might end up dying or being butchered for food.

"Our policy on animals and zoos is very clear and if the animals are going to be kept in an environment where they will not be harmed we have no problem, but there are still fears that this might not be the case," said WWF regional representative Kwame Koranteng. Speaking after a WWF meeting in Mombasa, Dr. Koranteng said there were fears the species selected for shipment to the Asian country would not survive in the new environment. "You cannot take a forest elephant and put it on grassland, it will not survive ... the environment will put the animals in stress," he said.

The WWF International director-general Jim Leape, said exporting the animals was not a bad idea if it was done properly. He praised efforts to protect turtles, but was concerned about threats to the animals on the Somali coastline. *Source: The Nation (Nairobi) 24 March 2006*

Moth Threatens China's 'Green Olympics'

Sexually attracting agents, insecticide lamps and bees are being used to combat a ravenous plant-eating moth which threatens to turn Beijing's "Green Olympics" brown, report China's forestry officials. The American White Moth *(Hyphantria cunea),* native to North American forests, threatened thousands of hectares of trees planted around Beijing as part of the campaign to host an environmentally-friendly Games in 2008.

Wu Jian, chief engineer of the forestry department, told China's state news agency Xinhua that efforts to present a green city to the world could be in vain if the pest was not effectively controlled. The moth is a prolific breeder that can lay up to 3,000 eggs at a time, with larvae capable of stripping a healthy tree of foliage in a matter of days. The State Forestry Administration said it had mobilized environmental defense forces across the region to counter the threat to forests in northern China. Xinhua did not say what sexually attracting agents were being used or how they helped eliminate the moths.

In addition to the planting of trees, environmental initiatives for the 2008 Games include pest elimination campaigns targeting rats, fleas and lice at gymnasiums and athletes' villages. *Source: Reuters online 30 March 2006*

Yangtse Dolphin Becomes a Victim of China's Success

A team of scientists is preparng to scan 1,000 miles of China's Yangtse River to see if its unique species of dolphin is the first member of the family of porpoises, dolphins and whales to have become extinct. Using binoculars and underwater microphones, experts from Britain, the United States and China will spend eight weeks this autumn surveying the newly industrialised habitat of the white river dolphin (*Lipotes vexillifer*). A pilot project that began in early March has failed to find one, leading to fears that the dolphin, or baiji as it is known in Chinese, has succumbed to the country's rapid economic growth. If a few are found, there are plans to move them to a nature reserve in the middle stretches of the river.

"This is the first full survey for nearly 10 years," the British project manager and wildlife film maker, Leigh Barrett, said. "We don't know if we will find any baiji, or even if it is safe to move them, but we are hoping that this project will give us the information we need."

As an industrial haze and the brown Yangtse waters lapped the sides of the project's research vessel, the dangers facing marine life were clear to see. Among other creatures at risk is the finless porpoise, also unique to the Yangtse and the world's only freshwater porpoise. The dolphins have already had to evolve to survive. Distinguished by their white bellies and long snouts, they have small eyes and see little, relying on sonar waves to navigate in the murky, silted waters. Their main foes are the queues of cargo ships plying the river, whose propellers snare them and whose noise disorientates them. They also share their home with the 400 million people who live along the river's banks.

Wang Ming, the research director at the Institute of Hydrobiology in Wuhan and the world's leading baiji expert, says the animal was never hunted because of its significance in Chinese poetry and mythology. According to the story, the dolphin was a beautiful maiden, kidnapped from the bank by the dragon who lived in its waters. When her father dived in to rescue her, he was turned into a finless porpoise.

The 1990s survey found 13 of the dolphins, leading him to conclude that there were fewer than 100 of the creatures left, but only a handful have been seen in the past few years. The last sighting, of a mother and child, was in May of 2005. In the early 1980s, pods of 10 and more would be seen basking in stretches nearby. *Source: By Richard Spencer, Telegraph Group, Ltd. 3/25/06*

Detection Kit Battles Trade in Bear Parts

Customs officers will soon be armed with bear detection kits in a bid to halt the burgeoning illegal trade in bear parts such as gall bladders and bear bile. The kit, being developed by the London-based World Society for the Protection of Animals, can detect products containing bear derivatives within minutes.

Despite being prohibited by the Convention on Illegal Trade in Endangered Species (CITES), bear bile and gall bladders are popular ingredients in traditional medicines. They are used to treat ailments ranging from arthritis to liver disease. Gall bladders can fetch up to 18 times their weight in gold,

says Eric Chivian, director of the Center for Health and the Global Environment at Harvard, US. Because of this, bear poaching and farming are rife in parts of south-east Asia such as China, Vietnam and Korea. In China, as many as 9000 bears are farmed in cramped conditions where they are subjected to painful daily extraction of bile.

Worryingly, bear derivatives are now being used in products such as shampoos, says Kate Sanders, a consultant with WSPA. And the only way to test a product for such ingredients is to send it to the lab, which is costly and time-consuming. So Sanders came up with the idea of a detection kit. The kit is being developed by Wildlife DNA Services in Bangor, UK. It works on the same principle as home pregnancy kits, which use antibodies to detect specific proteins. In this case, the kit's detector reacts with seven proteins specific to each bear species apart from pandas, in which there is little trade. "We can't do DNA tests in the field, so this is the next best thing," says Rob Ogden of Wildlife DNA.

WSPA campaigns officer David Eastham believes the kit will make a difference. "It's not going to eradicate the trade but it's going to act like a deterrent," he says. If successful, WSPA will consider developing kits for other animals threatened by trade such as tiger, musk deer, shark and whale.

It is ironic that traditional medicine is endangering bears, as the animals' unique physiology could help us develop new drugs, says Chivian, an expert on the importance of biodiversity to human health. Bears remain inactive for up to seven months during hibernation without developing osteoporosis. They also do not urinate in that time. Instead, they recycle their urea, using it to make amino acids to manufacture new protein. *Source: New Scientist.com 4/1/06*

'Living Fossil' Found in Laos

A squirrel-like rodent discovered in Laos is the sole survivor of a group that otherwise died out 11 million years ago, according to fossil data. The animal made headlines in 2005 when it was hailed as the only new family of living mammals to be found in 30 years. But scientists now believe it is a "living fossil", the relic of a group of prehistoric rodents once widespread in South East Asia and Japan.

The rodent, *Laonastes aenigmamus* , was found by scientists at a hunter's market in Laos in early 2005. Robert Timmins, from the Wildlife Conservation Society, saw it on sale next to some vegetables. "I knew immediately it was something I had never seen before," he said at the time.

While previously unknown to the worldwide scientific community, it is familiar enough to local people to have a name, the kha-nyou. The creature has dark-grey fur and is about the size of a red squirrel. It has short legs, a hairy tail and a long snout. After the kha-nyou was discovered, specimens were sent to London's Natural History Museum, to compare with material in its vast research collections. Based on differences in the skull, teeth, bones and other body features together with DNA analysis, scientists said it was an entirely new rodent family more closely related to rodents in Africa and South America than in Asia.

But when a particularly impressive fossil of a long-extinct rodent was unearthed in China last summer, a US-led team wondered whether the kha-nyou might be a living member of the long-gone family. They went back through the fossil evidence and found that the kha-nyou's skull, teeth, lower jaw-bone and other skeletal characteristics were a striking match to the fossil. They believe it belongs in the same group - the otherwise extinct rodent family Diatomyidae.

Chief author Mary Dawson, of the Carnegie Museum of Natural History in Pittsburgh, said it was extremely rare for a mammal to reappear after such a long gap in the fossil record. "A new family of living mammals does not crop up every day," she told the BBC News website. "When we have a living fossil it opens up a way of looking at past biodiversity on the molecular level that we don't ordinarily have."

The area of South East Asia where the rodent was found is regarded as one of the richest "hotspots" of biological diversity in the world. Several other new mammals have been found there in recent years, including a new species of bat, a mouse-like rodent and a hedgehog-like mammal. "It is highly likely that there are more exciting and unusual animals to be found in South East Asia," said Paula Jenkins, of London's Natural History Museum, who carried out the original analysis of Laonastes. *Source: By Helen Briggs,BBC News science reporter; BBC News online 3/09/06*

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The following three (3) positions are available at the Chaffee Zoological Gardens of Fresno, Fresno, CA. Please apply online at Chaffeezoo.org or mail a completed application and resumé to the Fresno Chaffee Zoo 894 West Belmont Fresno, CA 93728. Be sure to state which position you are applying for when sending application.

1) Zoo Keeper I
The Zoo Keeper I position is a journey level class in the Zoo Keeping series at the Fresno Chaffee Zoo. **Responsibilities:** of this class include the care, maintenance and observation for the health, feeding and care of a variety of zoo animals; record keeping, assisting in the movement of animals as directed, interacting with zoo docents, and assisting zoo visitors with questions and their needs. **Qualifications:** One (1) year experience in the care, handling and feeding of animals in a zoological setting. Twelve (12) units of accredited college or university level course work in animal science, zoology, biology, wildlife management, or related field may be substituted for six (6) months experience. Knowledge of behavior enhancements of exhibits, knowledge of exotic animal behavior, diets, and setting up breeding conditions is desirable. Good physical condition: ability to lift a minimum for 50 lbs. (i.e. feed sack) and move a minimum of 120 lbs. (i.e. hay bale). Good written and verbal communications skills. Must have (or obtain) a valid California drivers license with a good driving record Must be available to work weekdays, weekends and holidays. **Salary:** $2,430.00 monthly. This is a full time position with benefits.

2) Lead (Senior) Zoo Keeper
The Lead Zoo Keeper position is under the direction of the Curator or other supervisory staff. **Responsibilities:** will plan, direct and give instruction of activities to support staff responsible for the day-to-day operation of the zoological programs at the Fresno Chaffee Zoo. Will train support staff in the appropriate methods of husbandry, exhibition, enrichment, and maintenance (animal) needs of the zoo. This is an instructional/supervisory position. **Qualifications:** A minimum of 12 units of biology, zoology, life science from an accredited college/university. An Associate or Bachelor's degree is preferred. A minimum of two (2) years of full time work experience in a zoological setting. Good physical condition: ability to lift a minimum of 50 lbs. and move a minimum of 120 lbs. Good written and verbal communication skills. Good organizational skills; able to manage multi-task projects. Substantial experience and through knowledge of capture and restraint techniques. Good understanding of behavioral training theory and practical applications. Thorough understanding of safety procedures used in captive wildlife. Must have (or obtain) valid California driving license, with a good driving record. Must be available to work weekdays, weekends and holidays. **Salary:** $2,676.00 monthly. This is a full time position with benefits.

3) Zookeeper-Elephant
The Zoo Keeper I position is a journey level class in the Zoo Keeping series at the Fresno Chaffee Zoo. **Responsibilities**: of this class include the care, maintenance and observation for the health, feeding and care of elephants and a variety of additional zoo animals; record keeping, assisting in the movement of animals as directed, interacting with zoo docents, and assisting zoo visitors with questions and their needs. **Qualifications:** One (1) year experience in the care, handling and feeding of elephants preferably in a protected contact facility. Twelve units of accredited college or university level course work in animal science, zoology, biology, wildlife management, or related field may be substituted for six (6) months experience. Knowledge of behavior enhancements of exhibits, knowledge of exotic animal behavior, diets, and setting up breeding conditions is desirable. Good physical condition: ability to lift a minimum for 50 lbs. (i.e. feed sack) and move a minimum of 120 lbs. (i.e. hay bale). Good written and verbal communications skills. Must have (or obtain) a valid California drivers license with a good driving record Must be available to work weekdays, weekends and holidays.

Salary: $2,430.00 monthly. This is a full time position with benefits.

Bird/Mammal Keeper (2 Positions Available) —Cougar Mountain Zoo, Issaquah, WA
Send cover letter, resumé, and professional references to Cougar Mountain Zoo, Attn: Robyn Barfoot, 19525 SE 54th Street, Issaquah, WA 98027; Fax (425) 392-1076 or Email: RBarfootCMZ@aol.com. **Position(s) open immediately and until filled.** Cougar Mountain Zoo is looking for enthusiastic, self-motivated and friendly candidates for the day-to-day management of birds and/or mammals. **Responsibilities**: Will be involved in and responsible for daily routine, animal husbandry, maintenance of exhibit and off-exhibit areas, record keeping, enrichment and training, assisting in veterinary practices and educational programs. **Requirements**: Prefer BS degree in Biology/Zoology or related field or equivalent experience and training. Previous full-time paid experience in a zoological institution and ability to work in a harmonious manner with staff, volunteers and supervisors. Experience working with Carnivores a plus! Work schedule includes weekdays, weekends and holidays as assigned. **Salary/Benefits**: Salary ranges from $22,000 to $26,000 depending on qualifications and prior animal care experience. Benefits include vacation, sick leave, health insurance and uniform allowance in accordance with Employee's Manual

Large Animal Keeper 1 – Performing Animal Welfare Society, Galt, CA Submit resumé and cover letter to: Gina Lavoie, PAWS, P.O. Box 849, Galt, CA. 95632. PAWS ARK2000 Sanctuary is accepting applications for an Animal Keeper I to work in its Tiger Complex in San Andreas, CA Sanctuary. The Sanctuary is seeking a highly motivated keeper who exhibits the desire to assist in the care of our 36 captive tigers. **Responsibilities:** Will work daily in the cleaning, feeding and enrichment of large carnivores. Individuals should be responsible, punctual and seriously interested in learning about how to care for large captive exotics. Large Animal handling experience preferred. **Requirements:** The selected candidate will have excellent verbal skills and an ability to work in a physically demanding position. Ability to lift at least 50lbs; can deal with repeated bending and stooping and standing on feet most of the day. Knowledge of exotic animals preferred but not necessary. Large animal experience desired. References a must.

Large Animal Keeper 1 – Performing Animal Welfare Society, Galt, CA Submit resumé and cover letter to: Gina Lavoie, PAWS, P.O. Box 849, Galt, CA. 95632. PAWS is accepting applications for an Animal Keeper I to work in its Elephant Sanctuary in San Andreas, CA. The Sanctuary is seeking a highly motivated keeper to care for elephants in a in a protected contact environment. Elephant handling experience preferred but will train individuals with an interest in elephant keeping and at least one (1) year experience with large animal care. **Responsibilities:** Will work daily in the handling, cleaning feeding and care of both Asian and African elephants in a protected contact environment. Job is physically demanding requiring much bending and stooping, standing on feet most of the day. **Requirements:** The selected candidate should be responsible and punctual and in overall good health. Individual should demonstrate excellent verbal communication skills. One (1) year large animal care experience preferred but will train promising candidate.

Avian Trainer – Tracy Aviary, Salt Lake City, UT
Send resumÈs to: Tracy Aviary, attn: Sharon Dale, 589E 1300S, Salt Lake City, UT 84105; sharond@tracyaviary.org Position open until filled. The Tracy Aviary is seeking an extraordinary individual interested in becoming part of a small, but dynamic and innovative training and education team for our exciting, education department. **Responsibilities:** The position of Avian Trainer and Educator is a full-time position and is responsible for the performance of the on-grounds summer show as well as our outreach shows and classroom programs. Responsibilities also include daily care, weighing, preparing diets, training and exhibit maintenance for over 25 species of birds ranging from raptors and parrots, to pelicans and hornbills. **Requirements:** Applicant must be outgoing, creative, confident, self-motivated, and work well independently, as well as with others (including adult and youth volunteers). Applicant must have good stage presence and the ability to work in a fast-paced environment. A theater or environmental education background is encouraged. The position requires experience with bird training, positive reinforcement training techniques, and behavioral enrichment; a degree in biology, zoology, environmental/science education, or a related field, or an equivalent combination of education and experience.

Animal Care Keeper – Binghamton Zoo at Ross Park, Binghamton, NY
The Binghamton Zoo is currently accepting applications for current and future keeper openings. Please submit a cover letter, resumé and three (3) references to: Sheila M. Green, General Curator, Binghamton Zoo at Ross Park, 185 Park Avenue, Binghamton, NY 13903, or Fax to (607) 724-5454 33, or send an e-mail to sgreen@rossparkzoo.com. **Responsibilities**: The responsibilities of this position include but are not limited to the following: Provide daily care for the collection through feeding, watering, cleaning, observing and minor exhibit maintenance; diet preparation; completing daily written reports; administering prescribed medications; assisting with veterinary procedures; supply enrichment to animals under their care; some operant conditioning; interacting with the general public. **Requirements**: Qualified candidates should possess a degree in zoology, biology or related field. Must have good oral and written skills, work well in a team environment, exercise good judgment, be able to follow both written and oral instructions and be able to lift 50 pounds. Previous zoo experience a plus. **Salary**: Salary dependent upon experience.

Keeper/Educator - Wild Wonders/Zoofari, Carlsbad, CA
Wild Wonders/Zoofari, Inc. is a private facility located in northern San Diego county. Send resumé to wildwonders@earthlink.net or P.O. Box 2771, Carlsbad, CA, 92008. Direct inquiries to Jackie Navarro. To learn more, check out our website at www.wildwonders.org ***Position(s) available until filled.*** **Responsibilities:** General husbandry of our 100 animals in collection, performing outreach education programs to children and adults, handling and training of animal ambassadors utilized in programs, husbandry training. **Requirements:** Bachelors degree in zoology or related field preferred. Must have strong scripting, show presentation skills, husbandry experience. Looking for hard working, flexible and motivated individuals. Must be available any 7 days of the week including holidays. **Salary/Benefits:** Salary starting at $10/hr plus presentation bonuses. Health benefits included.

Full-Time Keeper Position - Conservators' Center, Inc., Rural North Central NC
Interested parties can reach Mindy Stinner or Douglas Evans by phone (336) 421-0065 or e-mail at mstinner@mindspring.com for additional information. ***This position will be open until filled.*** Position open at a non-profit carnivore sanctuary, educational and breeding facility. The position is for a full-time large carnivore keeper/trainer. The job is M-F, eight hours per day, with hours being somewhat flexible during daylight hours. This facility is not open to the public. **Responsibilities:** *Primary* -Care and cleaning of all large cats in sanctuary (lions, tigers, leopards); observing behaviors for changes and variations, injuries, illnesses, compatibility issues; some target training and a good deal of enrichment work. *Secondary:* Supervising and providing training to volunteers and interns; assisting with veterinary care as needed; assisting with food delivery and preparation as needed This job may expand to includeadditional responsibilities and authority as the person in the position and the facility continue to grow. **Requirements:** This is a hard work job with serious responsibility for human and animal safety. It will require great efficiency, attention to detail, some physical strength and endurance, and a good deal of patience. No smoking is allowed on site. Previous experience with large carnivores is not required, as training will be provided. However, prior experience working with wild animals is desirable. This position is an incredible opportunity to obtain work experience with large carnivores coming from difficult backgrounds. **Salary/Benefits:** Some benefits are negotiable after a trial period. To learn more about CCI, see our web site at www.conservatorscenter.org

Avian Keeper Internship - Pelican Man's Bird Sanctuary, Sarasota, FL
Email or fax cover letter and resumé to: Katherine Carrera, Director of Permanent Bird Collection. Email: KACarrera@gmail.com Fax: (941) 388-3258. We are a 25-year-old wildlife rehabilitation center and bird sanctuary on an island in beautiful Sarasota Bay. We receive 5,000+ birds and reptiles annually and exhibit 200 permanent avian residents. Pelican Man's Bird Sanctuary is offering ongoing internships. Internships are not paid and will last a minimum of three (3) months. We are looking for full or part-time interns. **Responsibilities:** Interns will work directly with animal care staff and will work in all aspects of daily husbandry duties. Duties include basic cleaning and feeding, record keeping, diet preparation, and enrichment. Interns will be responsible for inventing and implementing new forms of enrichment, learning the basis of operant conditioning and will assist in educating the public. Our staff is highly experienced in all aspects of animal husbandry. This a great learning experience! **Requirements:** Interns must be 18 years of age and interested in pursuing a career in an animal- related field.

Exotic Cat Internship – Center for Animal Research and Education, Bridgeport, TX
To apply for this position please send your resumé and references to Attn: Heidi Riggs, 245 County Road 3422, Bridgeport, TX 76426. C.A.R.E. is currently looking for qualified interns for 2005 and 2006. The Exotic Cat Internships run in 90-day sessions that allow for experience in the zoological field. C.A.R.E. rovides housing for all accepted applicants. For more information please see website at www.bigcatcare.org. **Responsibilities**: Assisting the Curator and Executive Director in planning and coordinating the care, diet, and maintenance of the habitats for exotic felines. Job duties include cleaning, food preparation, maintenance of enclosures and education work with the public. **Requirements**: Candidates must have good written/oral communication skills and the ability to work effectively in a team–oriented environment. Must have or working on a four-year degree in related field. All candidates must have the ability to lift 50 pounds and a willingness to work outdoors. Weekends and holidays are required.

Marine Mammal Internship – Pt. Defiance Zoo & Aquarium, Tacoma, WA
Please contact Jennifer Mack, Assistant Volunteer Coordinator, Education Department, 5400 No. Pearl St, Tacoma WA 98407 or volunteer@pdza.org for an application packet. The intern program in the Rocky Shores Tundra habitats at the Point Defiance Zoo and Aquarium is designed to provide participants with practical learning experience and knowledge in the field of animal husbandry and training (with an emphasis on marine mammals). In return, the intern makes a significant contribution to the Rocky Shores/Tundra area at the Point Defiance Zoo and Aquarium. Positions are available year-round. This is an **UNPAID**, full time position requiring a **minimum** of 10 weeks and 400 hours. Under the guidance of experienced zoo staff, the internship is designed to provide instruction and eventually independent, hands-on experience

in the following areas: Care of Animal Habitats, Nutrition and Diets, Environmental Enrichment, Public Presentation/Interpretation,Water Quality and Filtration, Animal Behavior and Natural History and Animal Training and Husbandry.

Aviculture Interns - the Hawaii Endangered Bird Conservation Program at the Keauhou Bird Conservation Center (KBCC) on the Big Island of Hawaii and the Maui Bird Conservation Center (MBCC) on the island of Maui. For more information on internships at KBCC, please send a resumé, cover letter and the names and contacts of three (3) references to: Tracey Goltz, P.O. Box 39 Volcano, HI 96785 or fax: 808-985-7034. For more information on internships at MBCC, please send this information to: Richard Switzer 2375 Olinda Road, Makawao, HI 96768 or fax: 808-572- 3574. Internships last for a 3-6 month period. Interns receive $20/day stipend plus housing. **Responsibilities:** Daily tasks include husbandry duties such as diet preparation, aviary and facility maintenance, behavioral observations of breeding birds, grounds keeping, predator control. **Requirements:** Applicant must be able to live with several roommates in a remote area and should show enthusiasm for work with captive endangered Hawaiian birds. Applicant must have a valid driver's license and health insurance.

Big Cat Internships - Tiger Creek Wildlife Refuge, Tyler, TX
For more information or to download an Application Packet, see http://www.tigercreek.org/internships.html, no telephone calls please, all applicants must complete the Application Packet process for consideration of program participation. The Big Cat Internship as seen on Animal Planet involves Animal Care Apprenticeship and Public Educational presentations involving Big Cats This is a 90-day position (by 4 quarters/terms) allowing one to gain experience in the zoological field. **Responsibilities**: Job duties include cleaning, diet preparation, light maintenance, educational tours, etc. Interns are responsible for the daily cleaning and health monitoring of a large number of exotic feline species including but not limited to tigers, lions, leopards and pumas. Big Cat Internship opportunities also include working in environmental education with schools and youth groups in a variety of learning activities. Interns will present short guided lessons on animal care techniques, conservation and rescue methods, backgrounds on the big cats and much more. This wide variety of teaching opportunities and educational training provides the intern with an exciting array of new skills and experiences. Training is provided by the staff. **Requirements**: At least two (2) years of undergraduate college work in wildlife management, education, biology, or related field. If no college experience then two (2) years of verifiable work experience in unrelated field or one (1) year of work experience in animal care field. All applicants must be at least 20 years of age by start date. These positions require motivated persons with a career focus in biology/zoology/wildlife management. Housing is provided for these non-paying positions. Interns provide a strong commitment to the refuge, with a six- day work week and light duties on Sundays.

Zoo Reptile Internship – Kentucky Reptile Zoo, Slade, KY
To apply, send a cover letter, resumé, transcript, and at least two (2) (preferably 3) references to: Kristen Wiley, Internship Coordinator, Kentucky Reptile Zoo, 200 L...E Railroad. Slade, KY 40376, or email to kyreptil@pop.mis.net. Starting dates are flexible, but a minimum of three months covering spring (April-June) summer (June-August) and fall (September-November) is required. ***Deadline is immediately for Fall is July 2006.*** The Kentucky Reptile Zoo, a nonprofit organization, is seeking student interns for the 2006 season. The zoo is an educational exhibit and venom research facility located near Kentucky's Red River Gorge and Natural Bridge State Park. **Responsibilities:** The intern will assist in the captive maintenance of the reptile collection, collect admissions to the exhibit, give interpretive talks and interact with the public, assist with educational outreach programs, and perform other duties as assigned. In addition, the intern will be responsible for the completion of at least one research project related to the field of herpetology. The intern will not be involved in the handling of any venomous species. **Requirements:** Desirable qualifications include a willingness to handle snakes and other reptiles on a daily basis, ability to communicate effectively with people, writing skills, attention to detail, and self-motivation. The intern will be required to work Saturday and Sunday, with days off during the week. Students majoring in the biological or natural sciences are preferred. Interns are required to be either college students or recent graduates. Former interns have arranged for academic credit with their institutions. Personal transportation is recommended. A valid driver's license is required. **Benefits:** Benefits include experience with one of the most extensive and diverse collection of snakes in the United States, housing, and $55/week to cover expenses. Interns have been successful in finding zoo keeper positions (over 95% hire rate).

Internship - (Tigers For Tomorrow Exotic Animal Preserve) Fort Pierce, FL
To apply send cover letter and resumé to: Susan Steffens/ Executive Director- Tigers For Tomorrow, 18905 Orange Ave, Ft. Pierce, Fl or email to sue@tigersfortomorrow.org. This non-profit organization is seeking two (2) possibly three (3) student interns for the 2006. Tigers For Tomorrow is a last stop exotic animal rescue preserve that houses and specialize in big cats. The preserve is in the beginning stages of moving to a new facility, interns will assist management in the move and care of the animals.

Responsibilities: The intern will assist in the daily husbandry of preserve residents, assist in interpretive talks, work with the public. **Requirements**: Desirable qualifications include the ability to communicate effectively with people, writing skills, orientation to details, and be a self- motivator. Benefits include room and board, and $50.00 a week. Personnel transportation is required.

Big Cat Internship – Big Cat Rescue, Tampa, FL
For more information contact Scott Lope at (813) 323-5991 or email at catfoto1@aol.com. Four (4) positions available for ongoing three-month internships at TAOS-accredited non-profit big cat sanctuary. See www.bigcatrescue.org **Responsibilities**: Include, but are not limited to daily husbandry, exhibit cleaning, diet preparation, feeding, operant conditioning and behavior enrichment for the following species – lions, tigers, leopards, cougars, lynxes, servals, caracals, bobcats, lemurs and other exotic animals. We provide invaluable experience, on-site housing and utilities, safety training and educational materials. Advanced training and long-term employment opportunities exist for the right candidates. Many of our interns have advanced on to careers in the animal field. **Requirements**: Applicant must be willing to work six days a week, some holidays and follow strict safety guidelines. Hard work ethic and love of animals more important than degree.

More Zoo vacancies can be seen by visiting:

American Zoo and Aquarium Association - Job Listings
http://www.aza.org/JobListings/

American Association of Zoo Keepers – Jobs
http://www.aazk.org/animalKeepersForum/opportunity_knocks.php

European Association of Zoos and Aquaria – News then Vacancies
http://www.eaza.net

Australasian Society of Zoo Keeping (ASZK)
http://www.aszk.org.au/Zoo%20Positions%20Vacant.htm

Zoo Vets, Technicians and interns
http://www.aazv.org/job_openings.htm

Bird Jobs in the Field
http://www.birdingonthe.net/mailinglists/BJOB.html

ATTENTION

THOSE INSTITUTIONS WISHING TO POST JOB OPENINGS ON THE AAZK WEBSITE

Institutions wishing to post job openings on the AAZK website (www.aazk.org) can now register online and be able to post your own listings rather than having to submit them to AAZK. From the Home Page go to Job Listings and follow the directions for registering your facility. All jobs must be approved by an AAZK Web Administrator before they will be allowed to go "live". AAZK reserves the right to refuse posting for jobs which we do not feel are appropriate or that may be in conflict with our purposes and mission statement. You need to follow the format protocol set up on the site when listing your job information. You are encouraged to list a closing date for applying for your job postings. At this time there is no charge for posting a job opening on the AAZK website.

Those zoos wishing to have job listings published in *Animal Keepers' Forum* still need to submit them to akfeditor@zk.kscoxmail.com by the 15th of the month prior to the month in which they wish the listing to appear (June 15th for July issue, etc.)

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About the Cover.....

This month's cover features the Peregrine Falcon (Falco peregrinus) drawn by Heather Neldner, zookeeper in the aviary at the Milwaukee County Zoo, Milwaukee, WI. The name peregrine means "to wander" or "wandering falcon" because they can be found on all continents except Antarctica. Peregrine falcons prefer to live in open spaces that are close to high cliffs often overlooking rivers or coastlines. They have also taken to living in cities with tall buildings serving as nest sites and hunting posts. Peregrines do not build a nest but will make a scrape on a cliff ledge or skyscraper ledge where they can lay up to four eggs that are heavily spotted with a rusty brown coloration. This species often hunts from a perch and can dive down at dizzying speeds of up to 200 mph and they can reach speeds up to 50 mph in level flight. These birds are built for speed - they have long pointed wings, a long tail for steering, a slim aerodynamic body, long toes and sharp talons for snatching prey from the air. Special muscles in their eyes help to keep their prey in focus as they dive down towards it. They also have special baffles in their nostrils to help them breath as air rushes in while they are in a dive. Peregrine falcons eat small to medium-sized birds and they often eat waterfowl leading to their nickname "duck hawk". The Peregrine falcon was heavily affected by the pesticide DDT which thinned its egg shells causing breakage prior to hatching. In response to this, several organizations began raising this species in captivity and releasing them back into the wild. This program has been so successful that the U.S. Fish and Wildlife Service has removed this species from both the endangered and threatened species lists. Thanks, Heather!

Animal Keepers' Forum publishes original papers and news items of interest to the animal keeping profession. Non-members are welcome to submit articles for consideration. Articles should be typed or hand-printed and double-spaced. Authors are encouraged to submit their manuscripts on a disk as well as in hard copy form. Manuscripts submitted either on disk or electronically as attachments to an email should be submitted in Microsoft WORD. All illustrations, graphs, charts and tables should be clearly marked, in final form and should fit in a page size **no greater than** 5.5" x 8.5" (14cm x 22cm). Literature used should be cited in the text (Brown, 1986) and alphabetically in the final bibliography. Avoid footnotes. Include scientific name (as per ISIS) the first time an animal name is used. Thereafter use common name. Use metric system for weights and measurements (standard equivalents may be noted in parenthesis). Use the continental dating system (day-month-year). Times should be listed as per the 24-hour clock (0800, 1630 hrs. etc.). Glossy black and white **or** color prints (minimum size 3" x 5" [8cm x 14cm]) are accepted. Clearly marked captions should accompany photos. Please list photo credit on back of photo. Photographs may be submitted electronically as either JPEG or TIFF file attachments.

Articles sent to *Animal Keepers' Forum* will be reviewed by the editorial staff for publication. Articles of a research or technical nature will be submitted to one or more of the zoo professionals who serve as referees for *AKF*. No commitment is made to the author, but an effort will be made to publish articles as soon as possible. Lengthy articles may be separated into monthly installments at the discretion of the editor. The editor reserves the right to edit material without consultation unless approval is requested in writing by the author. Materials submitted will not be returned unless accompanied by a stamped, self-addressed, appropriately-sized envelope. Telephone, fax or email contributions of late-breaking news or last-minute insertions are accepted as space allows. Phone 1-800-242-4519 (US); 1-800-468-1966 (Canada); FAX (785) 273-1980; email is akfeditor@zk.kscoxmail.com<

Deadline for each regular issue is the 10th of the preceding month.
Dedicated issues may have separate deadline dates and will be noted by the editor.

Articles printed do not necessarily reflect the opinions of the *AKF* staff or the American Association of Zoo Keepers, Inc. Publication does not indicate endorsement by the Association.

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E-Mail Addresses: You may reach Barbara Manspeaker at AAZK Administrative Offices at: aazkoffice@zk.kscoxmail.com< You may reach Susan Chan and *Animal Keepers' Forum* at: akfeditor@zk.kscoxmail.com<

AAZK website Address: www.aazk.org

BFR Website: http://aazkbfr.org

Scoops & Scuttlebutt

From the Editor

Being the editor for any publication is a job that requires accuracy and attention to detail. Having worked as a journalist for the past 40 years, and as Managing Editor for *AKF* for the past 25, I have been keenly aware of this. One hopes to never make any really glaring errors during one's career, but the chances of not doing so are, unfortunately, the exception rather than the rule. In the May issue of the *Forum*, there was a memorial tribute to the late Marvin Jones - a man who by any reckoning was a giant in the zoo field and nearly single-handedly helped shape the process of zoo animal record-keeping - especially on longevity of captive exotic mammals. To my great distress I have recently learned that the photo that ran with this memorial was not Marvin, but rather Jean Delacour. The photo had been cropped out of a group shot, and rather than trust my first instinct, I should have double checked with the San Diego Zoo on exact ID. My apologies to all of Marvin's colleagues, friends, and family. I have been assured by the individual who alerted me to my error that Marvin would have found great humor in this mistep, but I still feel really badly that it happened at all. Below is a photo of Marvin taken at the St. Louis Zoo in 1976 with another zoo luminary Marlin Perkins. I am not sure of the identiy of the primate in the center. Again, my apologis for this error. --*Susan D. Chan, Managing Editor AKF*

Have You Sent AO Your E-mail Address Yet?

In order to better communicate with our members, and also save the Association the rising costs of mailings/postage, we are working to establish an AAZK member e-mail database. With such a database we would be able to send out electronic membership renewal notices, information about upcoming conferences, and other Association news. In order to make this work, we need your help. Please send an e-mail to Barbara Manspeaker at aazkoffice@zk.kscoxmail.com with the words "AAZK Email Database" in the subject line. Please be assured that your e-mail address will not be shared with any other group or individual without your express permission. We are simply looking for ways to stay in touch with you as a member and to also help cut the costs of mailings and postage for the organization. Thanks in advance for helping us achieve this cost-cutting goal.

Are You Moving?

Make sure to notify AAZK National of your change of address. Don't miss a single *AKF* issue! Call: 1-800-242-4519 (US) or 1-800-468-1966 (Canada) or you can email change of address information to: aazkoffice@zk.kscoxmail.com<

From the Executive Director

I have just returned from teaching modules of the Advances in Animal Keeping in Zoos and Aquariums (AAKZA) course, in Omaha, NE. The curriculums presented for all of the classes and the learning atmosphere was, as always, very professional.

The AAKZA course had the smallest attendance of the seven courses presented. It is the instructors' concern that the class is not being marketed correctly to our audience, which is you, the professional animal keeper or aquarist. No matter how many years you have in this profession, you will come away with new knowledge or a new perspective on the animal keeping profession.

If you are considering entering the zoo management side of the business, the AAKZA is an excellent bridging step to the American Zoo and Aquarium (AZA) Management classes. If you just want to be a better informed animal keeper, understanding what aspects of the profession are considered during any decision making process, this is the class for you.

The AAKZA class is moving to a more permanent home in the AZA "Wheeling Schools". The change of venue will reduce the overall cost of attendance. Lodging for the week should be approximately 50% of past hotel room cost, and thus help make the class more affordable for animal keepers and their institutions. Make your plans now to attend the 2007 class, and stay tuned to the *AKF* and the AAZK website (www.aazk.org) for future enrollment information.

In FY05/06, the Board of Directors made a conscious choice to pursue grant funding and passive donations from outside corporations and foundations that match the interest and goals of the Mission Statement for our Association. The Association is proud to announce a $1000.00 donation from the Tony Stewart Foundation. Tony Stewart, a NASCAR driver and the 2005 Champion of the NEXTEL series, supports the professionalism of zoos and aquariums, exotic animal care, and other worthy causes associated with gravely ill children or injured race car drivers and their families. On behalf of the AAZK membership, I take this opportunity to offer thanks to the Tony Stewart Foundation for their support.

Ed Hansen, Executive Director

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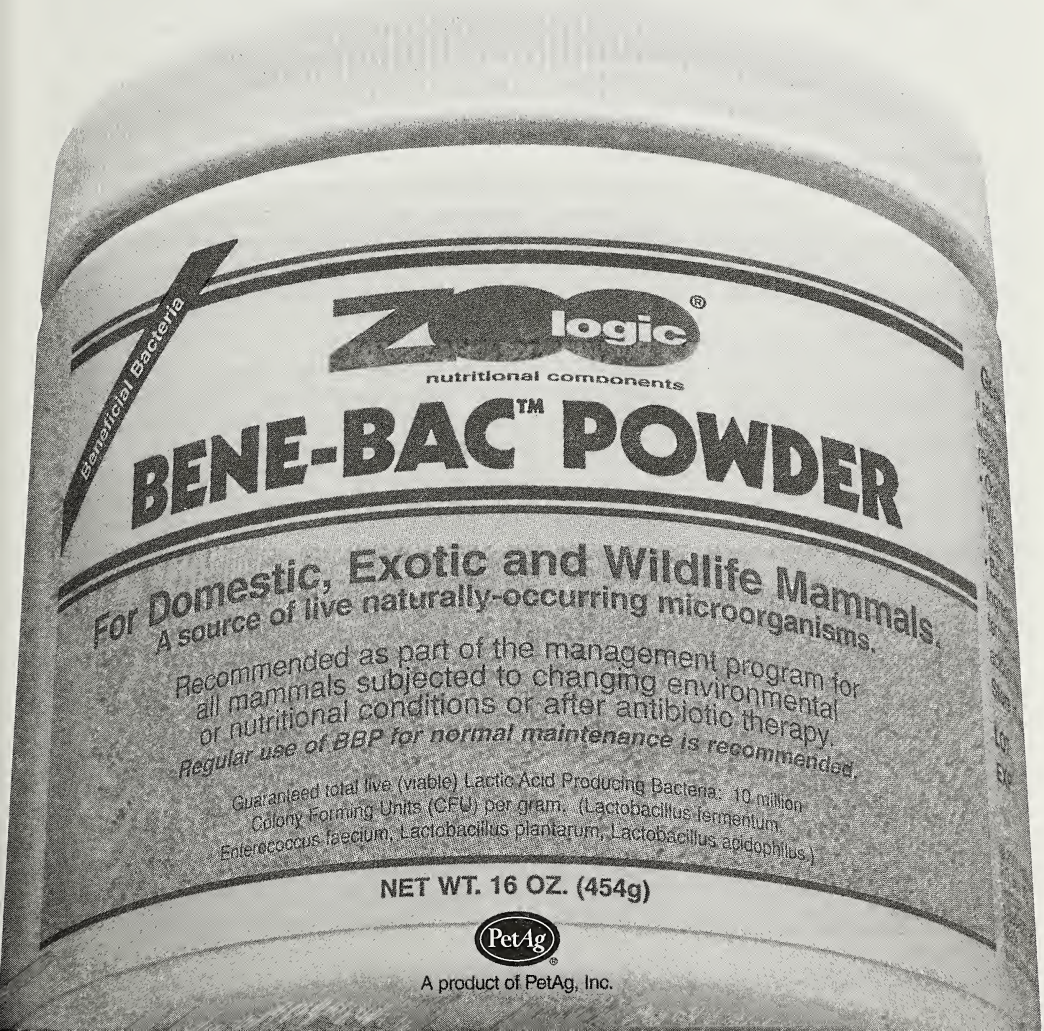

Coming Events

2006 International Gorilla Workshop - 23-26 June 2006 at Paignton Zoo, Devon, England. Paignton Zoo will be host. We would like to invite gorilla workers from all diciplines to register. Further information available at http://www.paigntonzoo.org.uk/gorillas/gorillaworkshop.htm

AZAD Regional Conference #1 - 21-23 July, 2006 at Columbus Zoo & Aquarium, Powell,OH. Annual delegate meeting on 20 July. Conference capacity is 300 people. For info contact Joyce Talkowski, Co-chair, ohioregional@abc.net, or: Jim Bartos, Co-chair, jbartazad@columbus.rr.com; or see www.AZADocents.org

Association of Avian Veterinarians - 6-10 August 2006 in San Antonio, TX. For information please visit www.conferenceoffice.com/aav or you can email aav@conferenceoffice.com; phone (303) 756-8380

Turtle Survival Alliance 4th Annual Conference - 10-13 August 2006 in St. Louis, MO. Hosted by the St. Louis Zoo, this will be a joint conference with the IUCN Tortoise and Freshwater Turtle Specialist Group. More info available at http://www.turtlesurvival.org

The Association of Zoo Veterinary Technicians 26th Annual Conference - 8-11 September 2006 at the Toledo Zoo, Toledo, OH. If you would like more information please visit www.azvt.org or contact Debbie Paperd at the Toledo Zoo (419) 385-5721 ext. 2120.

AZAD Regional Conference # 2 - 15-17 September 2006 at Arizona-Sonora Desert Museum, Tucson, AZ. Conference capacity is 200 people. For info contact Marge Drugay, mdrugay@msn.com or see www.desertmuseum.org/azad

33rd AAZK National Conference – 15-20 September 2006. Hosted by the Lincoln Park Zoo AAZK Chapter and the Lincoln Park Zoo, Chicago, IL. See information at their website www.aazk2006.org<

Animal Training Seminar - 18-22 September, 2006 at Shedd Aquarium, Chicago, IL. Five-day seminar on training techniques with Ken Ramirez. For more info and questions, contact Renee Birk at rbirk@sheddaquarium.org or call (312) 692-3328.

AAZV Annual Conference 20-24 September 2006 in Tampa, FL. For further informatin please visit http://www.aazv.org

AZA Annual Conference - 25-30 September 2006. Hosted by Busch Gardens, Florida Aquarium, & Lowry Park Zoo, Tampa, FL. See information at their website http://www.aza.org/ConfWork/AboutAnnualConf/#fut

Managing Animal Enrichment and Training - 7-13 October, 2006 in Portland, OR. For more information visit http://www.aza.org/prodev/ or email AZATraining @aza.org, or call Geri Noland at (301) 562-0777 ext. 238.

27th Elephant Managers Association Conference - 15-18 October 2006,in Albuquerque, NM. Hosted by the Albuquerque Biological Park. Pre-conference trips are to the International Balloon Fiesta, 14-15 Oct; post-conference trip to Santa Fe and up the tram to the crest of the Sandia Mountains. For more information see www.elephant-managers.com , or call Lynn Tupa at 505-764-6216 or Gwen Dragoo at 505-764-6264.

7th Annual Animal Behavior Management Alliance (ABMA) Conference - 14-21 January 2007. Conference at Sea: "Inspiring Conservation through Behavior Management", . The Cruise ship "Victory" sails from Miami, FL to Mexico, Cayman Islands, and Jamaica. All Inclusive Registration rate includes the cruise, all conference costs, international site visits, meals, room, and all taxes and port fees. Conference programming includes: Three keynote speakers sharing international conservation work with multiple species, formal presentations, seven workshops, panel discussions, a poster session, and site visits to animal facilities. All conference details, abstract submission forms, and registration information are available at www.theabma.org <http://www.theabma.org/> Pre-Registration deadline: 15 June 2006. Registration Deadline: 1 August 2006. Abstracts due 28 June 2006. Please contact Michelle Farmerie @ 412-365-2385 or Nicole Begley @ 412-323-7235 ext. 216 for more information about the conference.

Zoos and Aquariums Committing to Conservation 26-31 January 2007 – Hosted by the Houston Zoo, Houston, TX. ZACC is a bi-annual event that promotes the role of zoos and aquariums in supporting conservation activities worldwide, both at their institutions and in the field. Registration and more information available online at http://www.houstonzoo.org/ZACC, you may contact zacc@houstonzoo.org or phone 713-533-6745.

International Conference on Environmental Enrichment - 5-10 August 2007. Hosted by Schönbrunn Zoo, Vienna, Austria.

Post Your Coming Events Here
email to: akfeditor@zk.kscoxmail.com

Three AAZK Animal Data Transfer Forms Available Online

The American Association of Zoo Keepers, Inc. encourages all zoos and other animal care facilities to utilize the following data transfer forms whenever they are shipping an animal between facilities. Providing this information to the receiving facility will ease the transition of a new animal into the collection and provide vital information to receiving staff. With the greater emphasis on enrichment and training at all AZA-accredited facilities, this information will prove especially important in providing continuity and consistency when an animal is shipped.

All three forms are now available in downloadable pdf and Word format at www.aazk.org≤

All collection managers are asked to include all three of the forms where applicable whenever an animal is shipped. THREE copies of each form should be sent with the animal being shipped. At the receiving institution these copies should be distributed to the following staff:

a) Curator

b) Keeper who will be caring for the animal

c) Zoo files and/or veterinarian

1. The original **Animal Data Transfer Form** provides information on the animal, its diet, reproductive history, medical and physical husbandry information, etc. This form is one page in length.

2. The **Enrichment Data Transfer Form** provides information on the animal's behavioral history, and data on what types of enrichment have been utilized and their success or failure with the particular animal. This form is two pages in length.

3. The **Operant Conditioning Data Transfer Form** provides background information on any training that has occurred with the animal, training schedules, types of training, animal's reaction to training, etc. This form is two pages in length.

We all seek to provide the best and most professional care possible for the animals in our collections. Using the three AAZK data transfer forms will help provide receiving institution staff with the tools to make this possible. Your cooperation and participation is encouraged and appreciated. These forms are provided as a professional courtesy by AAZK, Inc.

AAZK Announces New Members

Daniel McLaughlin, **Franklin Park Zoo (MA)**; Tonya Vipperman, **Mill Mountain Zoo (VA)**; Andrea Leitch, **Busch Gardens (FL)**; Ami Pearson, **Great Plains Zoo (SD)**; Tracy D. McCarty, **Louisiana Purchase Gardens & Zoo (LA)**; Marci Kurtz, **The Aquarium at Moody Gardens (TX)**; Cinda Loutzenhiser, **Cheyenne Mountain Zoo (CO)**; Cameron Hastie and Bobbi Gordon, **Utah's Hogle Zoo (UT)**; Katie Springer, **San Diego Zoo (CA)**; Kara JC Harrell, **Fresno's Chaffee Zoo (CA)**; and Lann Kittleson, **Woodland Park Zoo (WA)**.

New Institutional Members
Jacksonville Zoo & Gardens
Jacksonville, FL
Delfi Messenger, Director of Animal Programs

Renewing Institutional Members
The Good Zoo at Oglebay
Wheeling, WV
Joe Greathouse, Curator of Animals

Micki Grove Zoo
Lodi, CA
Ken Nieland, Director

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Cleveland AAZK Chapter Donates to Lewa School Lunch Program

Cleveland AAZK Chapter became heroes for hundreds of school children when they recently donated $5,000 to the "**Lewa School Lunch Program**". As many of you may know, Northern Kenya has experienced the worst drought in 20-30 years.

The rains had failed and many families surrounding Lewa Wildlife Conservancy were small farmers. With no crops and livestock dying, these families were turning to Lewa for help. Lewa now supports eight schools in the surrounding area through donor funding. When funds are available, Lewa provides maize (corn) and beans for lunch, helps build and maintain the schools, and provides bonuses to obtain and retain teachers in these remote parts of Kenya.

Even though some rain has now come to Kenya, it is too late for planting, so there is still a tremendous need to feed the children. For most of them it is the only meal they receive all day.

Schools were opened on 10 May and two schools, Ntugi and Munanda, did not have any funds to feed the children. It costs roughly $3,600 to feed one school for an entire year. Thanks to Cleveland AAZK's generous $5,000 donation, these schools will now have the feeding program they so desperately needed.

Craig Cash with students on their lunch break at Lebarua School. They are holding the blue plastic cups that contain their lunch of maize and beans. *(Photo ©2004 Herbie Pearthree)*

When these children receive meals from Lewa, they learn that they are the lucky ones who benefit from their association with wildlife. Even though their crops occasionally are raided by elephants or baboons, they don't mind so much. They grow up learning the wildlife that brings tourists from around the world is what gets them through times of drought. They grow up protecting and appreciating the wildlife of their country.

For **more information on Lewa schools**, please visit www.lewa.org or send donations to:

Lewa USA/Adopt-A-School Program
P.O. Box 368, Marshall, VA 20116
All donations are tax-deductible.

Thank you Cleveland AAZK. You guys ROCK!!

--Patty Pearthree, Coordinator, AAZK's National "Bowling For Rhinos sponsored by Blue Rhino®"

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REACTIONS

A Question and Answer Forum for the Zoo Professional on Crisis Management

By William K. Baker, Jr., Curator
Panthera Research, Maumelle, AR

Question
Do master plans play a part in facility safety? (Part III)

Comments
In keeping with the two previous columns and discussion on master plan safety, the next step is exhibit design. While exhibits are typically handled either in-house or through a design-build firm, it is not totally unheard of for major or key exhibits to be designed in general terms (without the engineering drawings) to support the master plan print and to facilitate fundraising or capital expenditure activities.

General Exhibit Features

- Is the exhibit developed for keeper, service vehicle, and heavy equipment access? In other words, will the designer provide for long-term service access to the exhibit itself, otherwise the staff would have serious problems getting into the exhibit area for landscaping and repairs?
- Is the landscaping just an accent or has it taken over the perimeter of the area to the point of no return? It's important to have the capability to observe your animals for behavioral cues during the introduction process or that might be leading indicators of health problems.
- Does the exhibit area have adequate security to prevent public interaction with the animals? Secondary guardrails should be strong enough to prevent trespass and distant enough from the primary containment caging to prevent the public from reaching and making physical contact.
- Has any thought been given to night security? Night lighting should provide adequate light should the need arise. If the exhibit is expansive there should be enough security lights to enable the staff to see the entire yard at a glance, especially in an emergency (crisis or veterinary) that occurs at night or in inclement weather.
- Exhibit designers seem to have real problems understanding drainage surrounding an exhibit. All too often the exhibit is flooded from the public areas during heavy rains. Always direct water flow away from the exhibit into storm drains and if at all possible, put the exhibit on slightly higher ground. Drains in exhibits should be strategically placed near permanent props or better yet, in the corners. The drain mesh size should be sufficient to prevent escape or where applicable putting a hoof into the grate and breaking a leg.

General Night House Features

- The first item that should be noted is whether or not the entry has double containment. This "airlock system" is oftentimes the only thing between the animal and freedom. Also, do the doors swing inward and close backwards? There is nothing more embarrassing than having the animal out of primary containment, pushing the outer doors open, and then going for a walk.

- Are the internal corridors laid out so that you can effectively see end to end? Designers love putting in corridors at right angles. A good night house doesn't have blind spots. If there are blind spots leading to holding areas, have they been retrofitted with mirrors so you can see the animal before he can see you?
- Do the floor, corridor, and exhibit drains really work? Masonry contractors are notorious for deciding on their own what type of slope and brush finish your floors get. Don't forget drain size. I can't count how many night houses I have seen that have 1" lines instead of 3" or 6" lines to handle water volume. Also, I recommend the use of 12" X 12" box drains in the far corners to make hosing easier for the staff when conducting the morning cleaning procedures.
- Is the guillotine door system an afterthought? Does it stick if you look at it wrong? Corners Limited® produces the best design I have seen to date. They utilize stainless steel doors in a corrosion-free frame. The door actual rides on two coated rails that keep the fall and lift even. The cable rides inside conduit that is connected by internal pulleys that prevent the cable from binding or jumping. Also, as a side note, don't forget to make sure that the conduit or cable system you are using is routed where keepers can visually inspect it.
- Ventilation. Is your night house a sauna? Ventilator fans can reduce ambient heat. Don't forget air conditioning, heat, and circulating fans. In high humidity areas think about adding an in-line dehumidifier to your air conditioner. If you are uncomfortable, chances are the animals are too.
- With many of the current developments in operant conditioning and desensitization work, there are a few items you may want to include in the development process. Restraint chutes that are in-line with shift corridors leading out onto exhibit are helpful for veterinary procedures. Also, consider the possibility of including training areas adjacent to night holding to facilitate your training sessions. I find it helpful when training to have a quiet area to introduce new behaviors.
- Is the keeper work area, kitchen, or bathroom centralized? This way if something does go wrong, there is a safe, secure, integrated area. Ideally, this area should be equipped with a telephone, back-up radio, and serious containment such as reinforced doors or a viewing window of reinforced tempered glass or heavy Lexan® construction. The viewing windows should be located in a manner to facilitate clear fields of vision down the corridors without compromising keeper safety.

General Hoofstock Features

- Exhibits come in all shapes and sizes depending on the budget and goals of the institution. Hoofstock exhibits are really no exception to this, but the basic premise of the design is usually a constant with an exhibit yard and a series of holdovers, the complexity of which is dependent on whether it's a single taxa or a mixed-species exhibit with multiple species represented.
- At times the holdover system may incorporate a restraint chute or a system to facilitate animal husbandry, but this really is just a variance on the basic design. What I'm getting at is knowing the strengths and weaknesses of the exhibit. Examples of this would include knowing where the blind spots are on-exhibit due to props or landscaping, eliminating any trip hazards, and being aware of where the escape routes are or orchestrating them to facilitate staff exit in an emergency.

- Exhibit loading is a key factor when handling hoofed mammals in captivity. As a result, exhibit dimensions should be sufficient to handle the desired herd size. The best resource for this is the AZA Husbandry Guidelines that are applicable for the species that the exhibit will be holding. Failing that or if there are not specific guidelines, then the best alternative is to contact the SSP® or PMP Coordinator for a specific species. They will be able to provide a wealth of advice on what the current industry standards are, what works, and what doesn't work.
- An important design feature is to ensure that the flat side of the containment fencing faces the interior of the animal enclosure. This allows a better distribution of torque in the event of an animal impact and it's also significantly stronger as the supports are on the outside of the fence line, which prevents the potential of the boards, wire, or mesh from being stripped away from the verticals during a charge or impact. Also, if you use boards, always use screws to secure them.

Next Month: Does exhibit landscaping play a role in animal and staff safety?

If you would like to submit a question for this column or have comments on previously published materials, please send them to: ***AAZK, Inc., 3601 S.W. 29th St., Suite 133, Topeka, KS 66614 Attn: Reactions/AKF***

(About the Author: Since 1985 Bill has been active in the fields of science, zoology, and wildlife management. His education and experience include a B.S. in wildlife management and post-graduate studies in zoology, Lab and Museum Assistant, Shoot Team Leader, ERT Member, Large Mammal Keeper, Senior Keeper, and Zoo Curator at various zoological facilities. His area of research is crisis management in zoological institutions, which draws upon practical experience and training as a Rescue Diver, Hunter Safety Instructor, NRA Firearms Instructor, and Red Cross CPR/First Aid Instructor. Away from work he operates Panthera Research, which is a research and consulting firm.)

AAZK Animal Training Committee Seeks New Member!

Applicants should be professional members of the American Association of Zoo Keepers, Inc. Desired qualities include: a demonstrated understanding of animal training techniques, including operant conditioning; several years of experience training animals, preferably in a zoological or aquarium setting; an ability to communicate effectively and to facilitate learning through writing, workshop development and implementation. Although it is not required, it is helpful if committee members are able to attend the annual conference to help facilitate workshops and attend meetings. This position will include active participation in projects, including writing and resource development. Institutional support or approval is not mandatory, but is helpful to both the new member and the committee. For more information about the Animal Training Committee visit www.aazk.org. Interested keepers should send a letter of intent and resume to Kim Kezer, committee co-chair, at the following email address: kim@kezer.net. Please use "ATC member applicant" as the subject to the e-mail. **The deadline for application is 30 June, 2006.**

ATC
Animal Training Committee AAZK, Inc.

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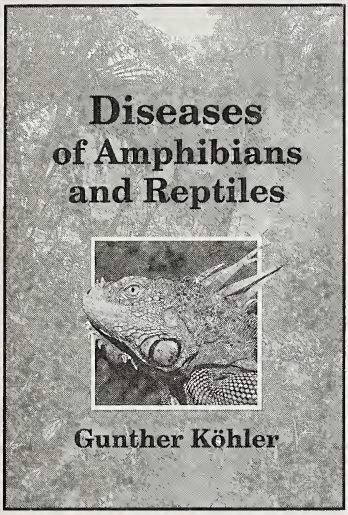
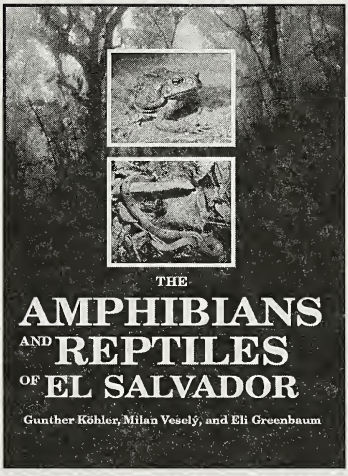


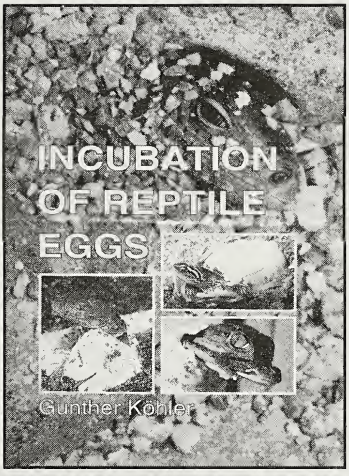
Diseases of Amphibians and Reptiles

by Gunther Köhler
Translated by Valerie Haecky
English Ed. 2006 ..... 184 pp.
ISBN 1-57524-255-9 ..... $37.50

Dr. Köhler presents clear, basic information on how to care for amphibians and reptiles, and he draws extensively on his experience as a veterinarian. He describes general diagnostic techniques—parasitological, bacteriological, mycological, and virological—as well as x-ray, ultrasonics and endoscopy. There is a section on proper care and housing for these animals, and the author stresses the importance of providing the right conditions for them, which will contribute greatly toward keeping them healthy. Dr. Köhler also supplies detailed descriptions of the major diseases that affect these animals, making diagnosis and decisions about the correct therapy easier. Tips on how to handle emergencies and give first aid are also provided. The book is a valuable guide for both veterinarians and hobbyists. Includes 133 Color Photographs, 58 Black/White Photographs and Illustrations.

Other titles by Dr. Gunther Köhler





The Amphibians and Reptiles of El Salvador

by Gunther Köhler, Milan Veselý, & Eli Greenbaum
Orig. Ed. 2006 248 pp.
ISBN 1-57524-252-4 $49.50

Incubation of Reptile Eggs

by Gunther Köhler
Translated by Valerie Haecky
English Ed. 2005 214 pp.
ISBN 1-57524-193-5 $38.50

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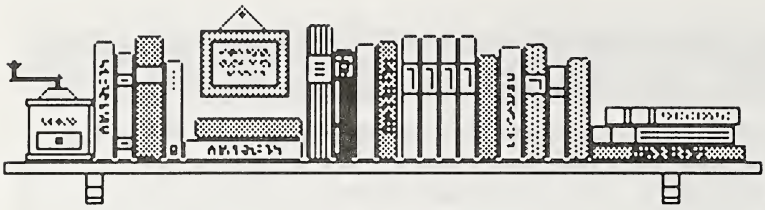

Book Reviews

Images of America: New York City Zoos and Aquarium
By Joan Scheier
Arcadia Publishing, 2005
Arcadiapublishing.com
ISBN 0-7385-3942-2
128 pp $19.99

Review by Jeremy Konwiser, Animal Keeper,
The Living Desert Zoo and Gardens, Palm Desert, CA

New York City Zoos and Aquarium is a gem of a book, and a must read for anyone in the zoo profession. An unassuming paperback, this book is full of wonderful black and white photographs tracing the history of zoos and aquaria in NYC's five boroughs. The book begins with acknowledgements and a short introduction by Dr. Dan Wharton, Director of the Central Park Zoo. The following chapters visit Central Park Zoo, The Bronx Zoo, Staten Island Zoo, The Queens Zoo, NY Aquarium, and concludes with a look at the Children's zoos. At only 128 pages and with multiple photographs per page, this book is a quick trip through the colorful past, present, and future of these venerable institutions. It is Joan Scheier's second book in the Images of America series, her first book on the Central Park Zoo was published in 2002.

Arctic Animals and Their Adaptations to Life on the Edge
By Arnoldus Schytte Blix
Tapir Academic Press/Publisher Gazelle Books
International Specialized Book Services, Inc., 920 NE 58th Ave., Ste. 300, Portland, OR 97213
ISBS ID# 93-1092199
272 pgs $63.00

Reviewed by Tracey Anderson, Instructor
Zookeeping Technology Program
Pikes Peak Community College,
Colorado Springs, CO

Break out the fleece and wool. Just reading this book made me shiver!

It states immediately in the preface, 'this book was written out of the frustration of having had to teach students in arctic biology without a proper book to give them an introductory overview of the arctic region and its animals.' That is indeed what this book is, a text. While the information contained in it is fascinating, it is not a light read. It does provide an introductory overview of the arctic region and its animals. It talks about what kind of animals live there and how they are adapted to their environment, which it what you would expect to find within the covers given the title of the book. But even though it is meant as an introductory guide, it is laid out as a text and is intended for the undergraduate student.

Chapter 1 starts with the Arctic Region. The information is very thorough, but by no means simple in its content. As suspected, there are many environmental variations within the arctic, but conclusion states that it is typically cold, dry and windy, to which anyone who's seen Shackelton can attest! Also covered in the first few chapters are ice caps, glaciers and growing seasons.

This book goes beyond polar bears and the arctic fox, including phytoplankton, zooplankton, ice algae, ice fauna and fish; even talking briefly on the Stellar's Sea Cow.

Field research with out mosquito bites? Not even in the arctic. The basking arctic insects are not even left out. The only thing that is left out are the amphibians and reptiles. The chapter in its

entirety states – "Amphibia and viviparous reptiles reach the northern edge of the forest, but rarely cross the treeline, and they are therefore not considered in this text." Of course, the marine mammals, terrestrial birds and mammals count for a large portion of material.

There is so much more information within the covers of this book beyond the adaptations of the arctic animals which is the part that I was anxious to explore. I know there is nothing simplistic about life in the arctic, and there is nothing simplistic in the way this material is presented. For someone NOT taking Arctic Biology, it was a somewhat challenging read at times.

Blix displays a subtle sense of humor and personality peppered throughout the text breaking the ominous presentation of one's typical text book.

Hippos: Natural History & Conservation
WorldLife Library Series
By Glenn Feldhake 2005
Voyageur Press/MBI Publishing Co., Galtier Plaza, Ste. 200, 380 Jackson St., St. Paul, MN 55101
ISBN 0-89658-726-6
Paper. 60 pgs, approx. 40 color photos, index and bibliography $16.95

Hippos live in the wild in more than 29 countries in Africa, where they have existed for approximately 20 million years. they are the second largestland mammal, after the elephant, weighing around 1400 lbs, and they inhabit a multitude of habitats and ecosystems.

Hippos provides an informative and entertaining overview of this wonderful yet enigmatic species. the book explores the hippo's evolutionary origins, social structure, behavior, role in the environment, and the latest population concerns and conservation activities. This book is intended for all readers interested in learning more about a recognizable yet seldom-studied species that is continually offering reachers fascinating surprises. The 10 x 9-inch formatted book includes many unique photographs from Feldhake's conservation work in Africa.

Amphibians, Turtles, and Reptiles of Cheyenne Bottoms *Second (Revised) Edition*
By Joseph T. Collins & Suzanne L. Collins; with photographs by Suzanne L. Collins
Publisher: Sternberg Museum of Natural History, Fort Hays State University - April 2006
Softbound, color cover; viii + 76 pages; 32 color photographs, 3 B&W photographs; 1 B&W illustration + 1 map; Index; Cost: Gratis

Cheyenne Bottoms, a nearly 27,500-acre wetlands situated in a relatively dry 41,000-acre lowland in central Kansas, sports a small but fascinating herpetofauna composed of 28 species -one salamander, eight frogs & toads, five turtles, two lizards, and twelve snakes. This delightful guide to the amphibians, turtles, and reptiles of the Bottoms is spiced with humorous anecdotes and asides that provide a sometimes whimsical, sometimes somber, view of these creatures, as well as solid information about their natural history along with the most up-to-date taxonomy backed by scientific evidence. The book is profusely illustrated with 36 images (33 of them in color) by co-author Suzanne L. Collins, a noted wildlife photographer.

For greater comprehension and ease of use, this book adopted standard common names for Kansas species as listed in Collins & Taggart (2002, Standard Common and Current Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians. Fifth Edition).

Sponsors of this elegant and informative little book include the U. S. Fish and Wildlife Service (Manhattan, KS), Sternberg Museum of Natural History, Fort Hays State University (Hays, KS), Kansas Department of Wildlife and Parks (Pratt), Westar Energy (Topeka), Kansas Herpetological Society (Topeka), Touchstone Energy (Washington, D. C.), and The Center for North American Herpetology (Lawrence, KS). Single copies of the 84-page book are available gratis by writing to the Sternberg Museum of Natural History, Fort Hays State University, 3000 Sternberg Drive, Hays, KS 67601-2006. Please include a self-addressed 7x10-inch envelope with $2.07 U.S. postage attached.

Legislative/Conservation Update

Compiled by Georgann Johnston
Legislative Advisor
Sacramento, CA

Cambodia: Flock of Endangered Birds Found

A flock of one of the world's most endangered birds - the white-shouldered ibis *(Pseudibis davisoni)* - has been discovered in a remote province in northeast Cambodia. A flock of between 20 and 30 white-shouldered ibis, a critically endangered species with only 250 existing in the wild, was found in a protected wetland in Stung Treng province, said ecological adviser Kong Kimsreng of the Mekong Wetland Biodiversity Conservation and Sustainable Use project. The flock was first found during a survey last November in the province, 150 miles northeast of Phnom Penh. Their presence was confirmed in a follow-up in March, Kong Kimsreng said. The flock did not appear to have fewer birds in the second survey, but he warned that local practices pose a risk to its survival.

"The main threat to the white-shouldered ibis is chick- and egg-collecting by local people," Kong Kimsreng said. "They don't understand that this is an important bird, that this is a rare bird in the world. They collect the chicks to keep as pets... to make their house nice."

Although it is illegal to catch the bird, wildlife protection laws are rarely enforced, he said. *Source: The Associated Press, Apr 27, 2006*

53 of 61 Smuggled Orangutans Will Be Sent Home Soon

In late April, officials from Thailand's Department of National Parks, Wildlife and Plants announced their decision to allow 53 smuggled orangutans to go back home to the forests of Indonesia. The decision was made during a meeting between Thai and Indonesian officials in Bangkok. A large group of NGO's worldwide campaigned hard to have the apes repatriated after two and a half years being kept in sub-standard conditions at Safari World, Bangkok and wildlife breeding centers in Thailand.

Although the Thai authorities still want to check DNA of all the orangutans to verify that the animals originate from the Indonesian part of Borneo, scientists and experts believe all but two are from this area. Two of the orangutans might be Sumatran orangutans and therefore also Indonesian. The Indonesian authorities have agreed to allow the second DNA test and the animals were returned to Indonesia before the results of the DNA check were available. Two years ago, DNA tests, financed by the Borneo Orangutan Survival Foundation (BOSF) in cooperation with the Thai Forestry Police, were conducted to prove that these same orangutans were not born of the legal orangutan stock at the zoo.

The 53 orangutans were all moved to the Nyaru Menteng Orangutan Rehabilitation Center, run by the Borneo Orangutan Survival Foundation. It was expected that the first half of the orangutans would be shipped back to Indonesia by the end of June; a second group should follow within four weeks after the first. Due to the level of care required for each individual animal, transporting too large a group at one time will be too stressful for the animals.

Veterinary and orangutan experts from BOSF and the Indonesian government planned to conduct thorough health assessment to check all the orangutans for zoonotic diseases such as tuberculosis and hepatitis, as well as the presence of parasites, bacteria and fungi. If animals were not 100% healthy, the stress of transportation might be detrimental and, in some cases, fatal. The healthiest ones would be returned with the first lot.

At Nyaru Menteng, all facilities are ready to welcome the orangutans back home; a quarantine area and new living quarters have all been constructed in the past two years awaiting the return of these orangutans. The fate of eight additional orangutans held by the Thai authorities confiscated from Lopburi zoo and two slaughterhouses in 2003 is not yet known.

For more information and pictures see: Wildlife Friends of Thailand (www.wfft.org). *Source: ZooNews Digest #398, 16-26 April 2006.*

Chinese Officials Seize Smuggled Bear Paws and Pangolins

The online edition of the official *Yunnan Daily* reports that Chinese police have seized hundreds of bear paws and dead pangolins that smugglers had injected with tranquilizers. Police in the southwestern province of Yunnan said that 20 members of a ring smuggling endangered animals had been arrested. Investigators seized 278 bear paws and 416 pangolins that had been smuggled by truck or train from Yunnan to three neighboring provinces over a period of 45 days from December to January. Ring members injected the pangolins with tranquilizers to prevent them from making noise during transport.

Bear's paw is a Chinese delicacy, while pangolin meat is believed to cure asthma. Other exotic wildlife that make their way onto Chinese dinner tables include camel's hump and monkey's brain. Tiger bones dipped in liquor are considered a tonic and tiger penis is believed to be an aphrodisiac.

However, a recent survey conducted jointly by the China Wildlife Conservation Association and US non-governmental organization Wildaid showed that a growing number of Chinese are changing their centuries-old tradition of eating exotic wildlife for fear of contracting diseases such as SARS. About 24,000 respondents in 16 cities and counties were interviewed between October and January for the survey. It found that the proportion of respondents who eat wildlife fell dramatically compared with a 1999 survey, and the number of restaurants offering wild animals dropped by 6.6%.

SARS, or Severe Acute Respiratory Syndrome, broke out in China's southern province of Guangdong in 2002 and in 2003 spread around the world, killing 774 people and infecting more than 8,000 people. A species of bat in China might have been the source of the SARS epidemic, Chinese health expert Zhong Nanshan has said, adding that the bats probably passed the virus to civet cats. *Source: Planet Ark via Reuters News Service 4-28-06*

Protection Sought for Desert Bald Eagles

Some environmental groups want to see Arizona's desert bald eagles (Haliaeetus Leucocephalus) classified as a distinct subspecies and keep them listed as threatened. In March, the Maricopa Audubon Society and the Center for Biological Diversity filed a lawsuit against the U.S. Department of the Interior's Fish and Wildlife Service to do just that. The wildlife agency is planning to take bald eagles off the Endangered Species List and rely on voluntary programs to maintain eagle habitats.

"There are lots of bald eagles, but there are no bald eagles like the Arizona bald eagles," said Bob Witzeman, conservation chairman of the Maricopa Audubon Society.

The desert nesting bald eagle has adapted to the hot weather and evolved into a nonmigrating resident of the Southwest, according to Witzeman. Many nest in the Tonto Forest northeast of Scottsdale, along the Verde River and along the Salt River in northeast Mesa. Arizona's 39 desert nesting pairs spend their lives within a limited area, breed earlier and do not interbreed with the estimated 300 other bald eagles that only spend winters in Arizona.

"This is a very rare population," Witzeman said. "It's worthy of protection under the Endangered Species Act because there are so few of them."

The legal action by the two groups follows a petition submitted in 2004 to reclassify the desert eagles. The group said the petition received no response from the USFWS. Under ESA regulations, the agency is required to respond to petitions within 90 days and provide a final determination within one year. According to the petition, if Arizona's eagles are taken off the ESA, federal agencies would no longer be forced to consult on bald eagle and habitat issues.

"The biggest problem that we'll have is, we'll lose habitat protection," said Robin Silver, board chairman of the Center for Biological Diversity and author of the petition.

"Losing ESA protection dooms the bald eagles in Arizona to certain extinction," Silver said. "We filed the petition to try and increase protection instead of decrease it."

USFWS officials said their will investigate the petition this year. The agency's position is that the desert birds are the same species as other American bald eagles and are not a separate subspecies. *Source: Tucson Citizen, April 19, 2006*

Proposed Regulations to Implement CITES in United States

In April 2006, the U.S. Fish and Wildlife Service proposed the first major update of regulations implementing the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) since 1977. The USFWS claims that the extensive revision is part of an effort to simplify procedures and reduce paperwork, while helping to ensure effective global wildlife conservation.

The regulation update package, published in the *Federal Register*, reflects consideration of more than 200 public comments received by the Service on a similar package that was introduced, but not finalized, in 2000. The new package incorporates measures adopted by CITES partners since 2000. Since inception of CITES 29 years ago, member nations have adopted more than 200 resolutions providing guidance on implementation of the treaty. The new regulation package pulls together provisions of 79 resolutions that are currently in effect. The regulation package will affect Americans who import or export CITES wildlife or plants. The proposed rules apply to trade in CITES species, whether commercial or non-commercial, including scientific, zoological and botanical imports and exports. They also apply to international travelers who want to bring CITES wildlife or plants or their products, into the United States.

The regulation package is designed to help customers who are seeking information about various aspects of the permitting process and is intended as an easy-to-use guide on what is needed to conduct international trade in CITES species. Most parts of the proposed regulations explain procedures and requirements already in effect. *Source: USFWS Press Release 19 April 2006*

Midterm Report on the 109th Congress

During 2005, the first session of the 109th Congress, animals won some important victories and the stage was set for breakthroughs in other areas. The following is a highlight of bills of interest to the animal-conservation community:

Multinational Species Conservation Fund: Approved $6.5 million in the Interior Appropriations bill for the Rhinoceros and Tiger Conservation, the Indian Elephant Conservation Act, the Great Ape Conservation Act, and the Marine Turtle Conservation Act, and $4 million for the Neotropical Migratory Bird Conservation Act. This continues a steady increase in funding over recent years for these programs that help protect habitat and prevent poaching.

Microchips: Congress included language in the Agricultural Appropriations bill directing the USDA to develop regulations that will allow for universal reading ability by pet microchip scanners. Some pet microchips in this country have been encrypted and their manufacturer has blocked efforts to enable them to be read by all scanners. This compounds the challenges of pet rescue and return.

Confined Animal Feeding Operations: Thwarted an attempt to pass a bill exempting factory farms from key environmental laws that require public reporting of toxic emissions and require polluters to pay for cleanups.

Arctic National Wildlife Refuge: A small group of Senators managed to block final passage of the FY06 Defense Appropriations conference report until a provision to open ANWR to oil and gas development was removed from the package. ANWR is a vast and unique wilderness that provides a 19.6 million acre home to more than 200 wildlife species – including polar bears, caribou, musk oxen, and arctic foxes— who depend on this ecosystem for their survival.

Wildlife Crossings: A multi-year transportation bill, signed into law as P.L. 109-59, includes requirements for the U.S. Department of Transportation to study and publish a report on ways to reduce wildlife-vehicle collision, produce a "best practices" manual, and develop a training course to guide state transportation planners on this issue. Every year untold millions of animals are killed on the nation's roads. These tragedies, and the costs of human lives and insurance claims, can be mitigated by implementing solutions early in the highway planning process. States that have given increased consideration to road placement, habitat connectivity, and the use of wildlife overpasses and underpasses have significantly reduce the incidents of road kill. *Source: The Humane Scorecard, a Project of the Humane Society of the U.S. February 2006*

New Big Game Hunting Regulations in South Africa

It costs over $26,000 U.S. to bring a hunted lion to its knees, which is why captive breeding stations have been established around South Africa to ensure a steady supply of game and put money in the bank. However, the South African government plans to exert a tighter grip over the lucrative hunting industry, which generates an estimated $67 million annually for hunting companies. Until now, however, they have been allowed to do what they liked.

In future, listed captive-bred animals such as lions, leopards and wild dogs will have to experience at least two years in the wild before they can become hunting prey. This is no mere nicety. What this proposed rule will introduce is the principle of a fair chase, something missing when captive animals are released to certain death in a confined space. These proposals are contained in the draft hunting regulations for threatened and protected species, as well as draft norms and standards for the regulation of hunting, which were promulgated by the South African Environmental Affairs and Tourism Department in May 2006. The draft regulations aim to simultaneously prevent abuse yet not deplete an industry that draws about 7300 foreign visitors to South Africa each year. South Africa offers the largest number of mammal species in the world, between 60 and 90, available for hunting.

According to departmental figures, 209 lions were hunted and killed in 2004. To bring a male lion down, hunters have to pay, on average, between $28,000 and $32,000, which includes a four-day hunt and the trophy animal. According to the Professional Hunters Association, the average price tag for a slain male leopard is about $85,000 for a 14-day hunt, with a further $3,000 for the trophy. With such lucrative rewards and a regulatory system full of holes, abuse has been widespread, in particular in the form of canned hunting, or the captive breeding specifically for the hunting of large predators such as lions, leopards and wild dogs. The department says there are about 110 captive breeding facilities in South Africa. These will be severely affected by the proposals.

Deputy director-general Fundisile Mketeni says the department will negotiate a transitional strategy with the captive breeders so they can get rid of their existing stock over a two-year window period. Rural communities that benefit from the hunting industry will not be adversely affected by the restrictions, he says, as they are mainly involved in activities associated with hunting for antelope such as impala and kudu. A permit system will be introduced for the breeding, hunting, trade and transport of species identified on a national list of threatened and protected species. All captive breeding facilities, nurseries, scientific institutions, sanctuaries and rehabilitation facilities will have to be registered within three months of the regulations coming into force. Hunters will also have to be registered with recognized hunting bodies and a national hunting register will record how many animals have been hunted, for what purpose, where, and by what method. A big advantage of the proposed system is that it will have national application and will replace the diverse provincial ordinances which currently govern the management of hunted species. *Source: Johannesburg Business Day 9 May 2006*

Video Cam Features Bald Eagle Chicks

A unique partnership between the USFWS's training facility in Shepherdstown, WV and the technology center of the Wheeling Jesuit University is bringing real-time online views of the growth and development of three energetic American bald eagle chicks. The camera is strategically placed directly above their nest on the grounds of the USFWS's National Conservation Training Center, a federal center providing education and training for natural resource managers.

"This is a tremendous, though limited-time opportunity, for science classes, Scout troops, and birdwatchers to tune in to a daily show that surpasses any sort of learning from a book or a still photo," Rick Lemon, director of the National Conservation Training Center. "That eagles picked this place to set up housekeeping is our good fortune, and this season we've been able to invite viewers from around the globe to witness first-hand how exciting biology can be. What a tremendous tool for teachers this is turning out to be!"

Already several million viewers have tuned in to watch as a pair of attentive eagle parents feed and care for their fledgling trio, perched on a sycamore tree high above the Potomac River on the 538-acre federal campus. This is the third year that eagles have nested in the same tree. The first egg was laid in the nest on 9 February 2006 with the first hatching documented on 18 March 2006.A link to the eagle cam and instructions for viewing is at www.fws.gov/nctc/cam/videoinstr.html. Still photos from the bald eagle cam and a running Web log of their daily activities are available at http://www.fws.gov/nctc/cam/. *Source: USFWS Press Release 26 April 2006*

AAZK Publications/Accessories Available

The following AAZK resource/reference publications in CD format and AAZK Logo Patches and Pins are available for purchase several ways. You may use the order form below; you may order online at www.aazk.org by either printing out an order form or using PayPal; or you may phone in your order at 1-800-242-4519 (U.S.) and 1-800-468-1966 (Canada) using either a Mastercard or Visa credit card. If sending in an order, please address to: AAZK, Inc., 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054 USA. Checks or money orders should be made payable to AAZK, Inc. in U.S. Funds ONLY.

Biological Information for Selected Mammals 4th Edition - The 1,396 page *Biological Information on Selected Mammal Species* CD covers a wide range from general, breeding, and young-rearing behavior to diet and physical descriptions of 590 species. The volume is in a PDF format allowing searches by Species (Common or Latin name); or Key words using the *Find* function; or by Species (Common or Latin name), Family; or Order using the *Bookmarks*. Table of Contents are given for Orders, Families, Species by Common Name, Species by Scientific Name, and Species by Order and Family. The Appendices cover a variety of information from behavioral patterns common to families (Bovid displays) to taxonomy (Primates). References are listed by Order and Family. Prices: AAZK Member $25.00 NonMember $40.00

AAZK Enrichment Notebook, Third Edition - This 455-page publication includes many facets of animal enrichment and is indexed for easy reference. The sections include an Overview of Enrichment, Enrichment Links, Enrichment Suppliers, Suggested Guidelines (Bats, Bears, Birds, Carnivores, Fishes, Primates, Reptiles, and Ungulates), Safety Considerations, Lists of Browse Plants and Toxic Plants, Cookbook Recipes for Enrichment, Enrichment Ideas/Devices (organized by category), Sample Enrichment Forms currently used in zoological facilities, and an extensive Enrichment Bibliography. This is a searchable PDF format document utilizing Acrobat Reader which is included. Prices: AAZK Member $25.00 NonMember $40.00

Zoonotic Diseases, Third Edition - Searchable PDF Format • Hyper-linked Zoonotic Disease List • Updated Guidelines for Animal Care Personnel • Updated Hygiene and Disinfection Section • 82 pages of Information. AAZK Member $9.50 NonMember $12.00

Publication prices include domestic and Canadian shipping. For overseas orders, please add $5.00 per CD for Air Mail service.

The New AAZK Logo is now featured on both patches and enameled lapel pins. The colors are tan, rust, burgundy, grey and blue with a black border. Patches (4" x 3") cost $8.00 each. Lapel pins are $6.00 each. Prices include domestic and Canadian shipping. This price covers postage for one (1) pin or one (1) patch to overseas addresses. For orders from 2-6 patches or pins, overseas orders **must** add $2.00 additional for shipping.

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2006 AAZK National Conference

PAPER DEADLINE

Remember the deadline for completed papers is July 1st. We are going to try to have the proceedings available at the conference itself so having the papers on time would be a great start. Contact Michael Brown-Palsgrove at mbrownpalsgrove@lpzoo.org with any questions.

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September 15-20, 2006

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Non-member	$225.00	_____

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Send this form and all fees to: AAZK 2006 Conference Registration, Lincoln Park Zoo, P. O. Box 14903 Chicago, IL, 60614. *Fees include a $50 Contribution to AAZK National.

Conference Notes and Updates

AIRLINE INFO

United is the official airline for the conference. They have offered a 10% discount for reservations 30 days or more in advance, and a 7% discount for less than that. Discount Code # is 537TG. (Discount rates in the April issue were listed incorrectly, sorry for the confusion). Discount rates are available from 11-24 September 2006.

EXHIBITOR'S TABLES

There is space in our designated Exhibitor's Hall for AAZK Chapters or groups interested in selling or displaying their merchandise or causes. Cost per table will be: $50 for AAZK Chapters; $100 for non-profit groups such as TAGS, Conservation Groups etc.; $200 for profit groups such as artists, suppliers, etc. Please contact Marie Perez at mperez@lpzoo.org or at 312-742-2140

PRE/POST CONFERENCE TRIPS

The pre-conference trip will be to the Milwaukee County Zoo on Thursday, 14 September. More details to follow. www.milwaukeezoo.org

Our post-conference trip will take us to Peoria, IL-151 miles southwest of Chicago. This will be an overnite adventure (20th & 21st September) featuring the Wildlife Prairie State Park & the Glen Oak Zoo. At the Wildlife Prairie State Park, you can discover the animals that called Illinois home during the pioneer days. This unique 2,000-acre zoological park is home to wolves, bison, waterfowl, black bear, elk, cougar, otter and much more. www.wildlifeprairiestatepark.org We'll spend a nite on the prairie & then check out the Glen Oak Zoo the following morning for behind-the-scenes tours & a special sea lion feeding session. Limited to 20 adventurers. www.glenoakzoo.org

More information will be posted about the trips soon, or go to www.aazk2006.org for updates. Questions? Contact Cruzanne Lewis at **clewis@lpzoo.org**.

CHAPTER CHALLENGE

The Lincoln Park Chapter will continue with the Chapter Challenge that was started by the Cleveland Chapter at the 2003 conference. In order to help keep the delegates costs as low as possible, while still putting on a conference worthy of our predecessors we encourage all AAZK Chapters to donate. Any Chapter donating $250.00 or more will be entered into a drawing with the winner receiving one full registration and one double occupancy room for five nights at the Millennium Knickerbocker (Sept. 15-19). Total value of this prize is almost $1200.00! As of May 1st we are standing at three Chapters meeting the Challenge - the Kansas City Zoo Chapter, the Snake River Chapter, and the New Orleans Chapter. The Cleveland Chapter met and exceeded the Challenge with a donatin of $500! Thanks to those Chapters and come join them! Questions? Email to mskidmore@lpzoo.org

SHEDD AQUARIUM

The Shedd Aquarium had been kind enough to offer free admission to conference attendees from September 11-22, those dates will cover anyone who is coming early or staying extra days. To get free admission **you must show your AAZK membership cards** so bring them with you. Highlight exhibits at Shedd, other than the original aquarium which opened in 1930, are the Oceanarium featuring marine mammals, the Wild Reef with a focus on coral reefs and sharks, and their newest special exhibit - Lizards and the Komodo King. See sheddaquarium.org The Shedd is easy to reach from the hotel. The concierge at the hotel can provide directions.

AUCTION ITEMS

If you are donating an item for the auction, it would be helpful to send it early to: Lincoln Park Zoo, c/o AAZK/Hoofstock, PO Box 14903, Chicago, IL 60614. (If sending UPS send to 2300 N. Cannon Drive instead of the PO Box).

People Skills for Animal People

By Jolene Hamrick
AKF Associate Editor
Tucson, AZ

Understanding Diversity in Personality and Work Styles - *Part III*

As you may remember from last time, we identified four keeper personality profiles: the analytical thinker, the detail-oriented keeper, the emotional socialite, and the creative dreamer. Although not all inclusive, these four broad categories provide a foundation for understanding and linking observable behaviors, root cause, and finally our topic this time, communication style.

Before understanding what approach to take with your co-worker it would be helpful to first do a little self-analysis to determine your own preferred communication style. As you'll see in a few minutes, each of the styles has a polar opposite. Ultimately what this means is, depending on your own style, communicating with someone who has a style opposite yours may require quite a bit more stretching on your part. Identifying this ahead of time will allow you to play to your strengths and work on your weaknesses.

Once you understand what makes your co-worker tick, you make the choice of how you want to use this information. This may sound manipulative, and in a way it is. You can use this information to build rapport, effectively work with the individual to solve problems, resolve conflict, or just mess with their head. For the purpose of this discussion, we'll focus on the first three. Recommendations for communication with the various personality styles are taken from "Understanding the Value of Different Personalities in the Workplace" by Julie Kembel, Northwest Learning Associates, 2005.

Here are some ideas on how to communicate with each of the following styles:

Analytical Thinker:
Wants to be respected for their intelligence, objectivity, and problem-solving abilities.

***Building Rapport*:** Show appreciation for their intellect. Listen well; they don't like being asked to repeat themselves. Respect their independence and their personal space. Don't invade their privacy by asking too many personal questions; let them set the pace. This means, don't show up for a social visit at the barn unannounced. Show interest in their projects but without being too nosey. Feel free to ask advice on how to tackle animal problems, but listen carefully.
Problem Solving: In conversation, be direct and to the point. Think and talk in terms of the big picture. Don't get caught up in the details. Ask what they *think*, not what they *feel*.
Conflict: Present the facts; provide proof; build your case logically. Don't try and pull a fast one; they'll see right through it.

Detail-oriented Individual:
Recognize their organizational skills, dedication, hard work, and adherence to rules and deadlines.

***Building Rapport*:** Don't surprise them with things; give them plenty of warning about changes. Follow through with your word by completing the task/assignment/etc. Don't interrupt their routine. Appreciate them for their organizational skills. Translation: Don't go moving things around in the night house, especially if you are a swing/shift keeper and they are the primary keeper. If you want

to make changes, communicate this first. Show them how the change will help benefit and maintain organizational flow.
***Problem Solving*:** Present the details. Spend less time planning and more time doing; they want to complete the task at hand.
Conflict: Allow them some sense of control; don't overwhelm them with unanticipated actions.

Emotional Social Individual:
Value them for their kindness, supportive nature, generosity, and idealism.

***Building Rapport*:** Foster a connection. Indulge in small talk, but don't be insincere. Nurture the relationship through sharing feelings and experiences. Ask them about the animals that they care for. Share your stories with them. Be wary of jumping into business right away.
***Problem Solving*:** Don't rush them; allow them to take their time expressing an idea. To them, the journey is more important than the completion of the task.
Conflict: Don't be too abrupt, feelings are easily hurt. Body language should be inviting, not rigid or standoffish.

Risk-taker, Creative Dreamer:
Appreciate them for their originality, spontaneity, adaptability, and their unique style.

***Building Rapport*:** Be energetic in your exchanges. Don't bore them! Be prepared for their fast pace and their desire to go in seven different directions at once. Impose routine on them only when absolutely necessary, as these keepers will strive to find ways to do it different every time. Or if you force them to conform, they'll likely take short cuts on the boring stuff so that they can move on to the non-routine items more quickly.
***Problem Solving*:** Sense of humor is valued; entertainment value is helpful. Be open-minded; think outside the box; utilize multiple venues to get your point across (i.e. visual, auditory, etc). They like to be stimulated, but they are also very busy and they want their inflow of information to be brief and to the point.
Conflict: Don't be afraid to engage their competitive spirit. Don't try and overload them with data; it won't be effective.

If you haven't already identified the polar opposites in the group, the analytical keeper and the emotional social keeper may have a difficult time finding common ground, as will the detail-oriented and the risk-taker creative dreamer. The analytical type is uncomfortable with the touchy-feely approach, and the emotional keeper will likely view the analytical keeper as cold and impersonal. The detail-oriented keeper may see the dreamer as flighty and disorganized and, conversely, the dreamer sees the detail-oriented keeper as way too anal retentive. These gaps, if not recognized by the players involved, will likely lead to miscommunication, feelings of hurt or frustration, perceptions of incompetence, and general discontentment.

As an individual employee you can only increase your awareness about your group's dynamics and, if you so choose, alter your behavior in an attempt to bridge the gap. As a manager, you may determine that the team dynamic could use some tweaking. Depending on your available resources, it may be advantageous to do a little research and utilize an outside source to provide a more tangible map of the personalities with whom you're working. Such an outside source can provide ideas on how to attain greater cohesion, thereby reducing friction on the team. Hopefully this series has provided some insight on ways to improve your communication in your working relationships.

In August, we will begin a series on career advancement, covering subjects such as gaining entry into the zoo keeping field, resumé writing and interviewing skills.

Reduce, Reuse, Recycle

By Susan Chan, AKF Managing Editor

For most of us DVDs and CDs have become a part of our daily lives – we watch movies, store photos, play games and music or save computer files. Twenty-five years ago, CDs and DVDs didn't even exist. CDs in particular are a great way to store lots of information without that information taking up every "flat space" in your home.

However, part of the real problem with this new technology is what to do with them when we no longer need them. By some estimates, between 8-10 billion of this shiny disks (and their accompanying "jewel cases") will be tossed into trashcans by consumers over the next five years. They are not biodegradable and only end up adding tons of plastics into our nation's landfills.

Both DVDs and CDs are composed primarily of a type of plastic known as polycarbonate. This plastic can be recycled and reused. So can the jewel cases that are made of a harder plastic known as polystyrene. Fortunately worldwide a number of companies have popped up that grind down disks with the reclaimed material going into such products as automotive part and insulation for electric cabling. While most of these companies only deal in large-scale industrial shipments, there are a few that allow individuals to recycle their e-waste: EcoEncore (www.ecoencore.org) and Ecodisk (www.ecodisk.com) are two examples. With these companies you can send up to 20 lbs.; some charge a small fee, others are free. EcoEncore, which is a nonprofit 501(c) (3), makes it possible for you to donate a portion of the proceeds from your donation to the group or charity of your choice. More about that later in this article.

Did You Know?

• The entire process of encoding music onto a CD takes only about 5-10 seconds. A high-pressure stamper embeds the digital information into tiny indentations on a polycarbonate plastic disk, which is later coated with metal.

• In 2000, more than 700 compact disk factories were operating worldwide.

• When CDs were first introduced in the U.S. in 1983, 8000,000 discs were sold. By 1990 this number had grown to close to one billion and climbing.

• Between 1983 and 1996, the average price for a music CD in the U.S. fell by more than 40%.

• Each month, more than 45 tons of CDs become obsolete – outdated, useless, unwanted.

• Each year, more than 55 million boxes of software go to landfills and incinerators, and people throw away missions of music CDs.

• Used CDs and DVDs can be recycles. The disks are erased, formatted, labeled and environmentally packaged. Companies that do this provide secured, audited disposal of intellectual property stored on electronic media.

Taking Action – Simple Things You Can Do

• Find out if the information you're looking for on disc is available over the Internet. If so, you may not need to buy the disc—this is especially true for software updates.

• Prolong the life of your discs by keeping them out of direct sunlight and away from heat and water. To repair minor scratches, rub a mild abrasive (e.g. toothpaste) on the non-label side in a circular motion from the center out.

• Buy used CDs or DVDs or borrow them from others to help reduce the environmental impact associated with manufacturing new products.

• Dispose of unwanted CDs or DVDs only when you have no other choice. Instead, sell them to a used CD store, share or trade them with friends, or donate them to schools, libraries or other organizations.

• Give unwanted CDs and DVDs a new lease on life. CDs can be recycled into burglar alarms, street lighting and lenses. DVD cases can be recycled into birdfeeders. Collect your or set up a collection bin at your facility and send to Polymer Reprocessors. For details, visit http://www.polymer-reprocessors.co.uk/

• If you are using CDs for data storage, look into using DVDs instead – you can store seven times more data on DVD while using less material, thereby reducing the number of discs needed.

• Set up a CD/DVD Swap Meet where participants can exchange those items they are done with and pick up movies or games they want. There are also more and more Used CD/DVD stores popping up—check them out.

Reuse

• There are two types of CDs and DVDs. CD-Rs and DVD-Rs are "read-only" and can only be used to play what is already burned on to them –usually music or a software program or a movie. There are also "re-writable" CD-RWs and DVD-RWs designed for data storage that can be reused up to 1000 times.

• In addition to the obvious reburning or re-writable CDs and DVDs, you can reuse CDs and DVDs for a variety of craft projects. They are very easy to cut into any shape with ordinary household scissors and can be decorated with a variety of markers and paints. Here are a few examples:

* Drink coasters – buy a small piece of corkboard from a local craft store, cut four 1 x 1-inch squares and glue them to the printed side of the CD. Leave the shiny side up for your coaster. You can also use the pre-gummed felt circle table protectors instead of the cork.

* Candle holder – Place the CD under large pillar candles to catch the wax

* Scarecrows – Some people swear by this: hang CDs in your garden to scare away the crows. The shiny surface moving in the breeze will scare away the birds.

* Reflectors – Use as reflectors on fence posts, bicycles, driveways, or anywhere you want to call attention to something in the dark.

* Disco Ball – Cut up a CD into 1/2-inch squares and glue them to the outside of a ball. Hang the ball from the ceiling and shine lights on it.

* Christmas Decorations – Hang your CDs outside on a tree at Christmas time, they can stand up to any weather and really catch the lights.

* Wall Borders: CDs make a unique wall border for a teen's bedroom or music studio, just glue the CDs around the room where a wallpaper border would ordinarily go.

* Garden Row markers – write the name of the vegetable with a permanent marker on the CD or DVD. Cut the edged of each into a flower shape if you want. Glue or tack the CD to a stick and put in the ground to mark your garden rows.

Earlier in this article, I promised more information on EcoEncore. This organization is located in Seattle, WA and provides a great way for people to clear their homes of their used CDs, videos and books that have accumulated. This innovative project finds buyers for these items, diverting them from landfills and channeling the proceeds into organizations working to protect the environment. A win-win situation!

EcoEncore is a 501(c)(3) nonprofit organization so donations to them are tax-deductible, and they will provide tax receipts upon request. More than 90% of their expenses are program-related and 100% percent of their profits goes to the recipient organizations they serve. As a donor, you can direct the proceeds of your donation to benefit one of their recipient organizations (all of these are located in the Pacific Northwest and benefit the environment). For directed donations (where the donor specifies the recipient organization) 70% of the proceeds go to the recipient. Proceeds gained from general donations are accumulated in a general fund and distributed at the end of the year among EcoEcore's recipient organizations. Check out their website for more information on how to make a donation (www.ecoencore.org) or if you have questions email them at ecoencore@ecoencore.org<

So, let's get busy—clean out those closets, drawers, boxes and other places where CDs, DVDs, videos, etc. accumulate. Find ways to reduce, recycle, and reuse these modern technology items. It's the earth-friendly thing to do.

Bowling For Rhinos Update

Bowling For Rhinos events are in full swing now. Blue Rhino has selected a few events to focus their efforts on this year in the way of PR, getting employees to join events, donating gas grills as prizes,etc. Please be sure I have your event date and contact info if you have not done so already for this year to ppear3@pear3.org.

When grilling out, choose Blue Rhino Gas as they send funds to BFR each year. The better their company does the more money they will send to BFR. I will have free PR kits from Blue Rhino at this year's conference so ask your chapter to make sure they pick one up. If you are able to put their logo on your T-shirts without costing your chapter extra money, please do so. You can do a black/ white logo instead of blue if it will keep costs down. Also, please display the Blue Rhino banner at your event if you have one. It would be a huge boost to get Blue Rhino mentioned in any media coverage of your event. Not only are they sponsors of the event ($20,000/year) but they are dedicated to helping us become more successful.

Blue Rhino Gas has selected BFR as their only "Cause" to support this year and will make every effort to increase our fundraising abilities but they need our help to do so. Please provide me with your event date as soon as possible next year along with your event contact info. From a PR standpoint I've been told that if we can work towards having our events in May each year, preferably the first weekend in May each year, it would be best. So please consider having an early May event for 2007. Having most, if not all of our BFR events during May will give us greater leaverage for publicity nationwide.

Blue Rhino is working on getting articles about BFR in "In-Flight" & travel Magazines. Once this is done, it would be nice to hook up the general public with their local BFR events. I can only do this if I have that information.

So good luck with your events and please feel free to contact me with questions or concerns at: ppear3@pear3.org or 919-678-0449 or see the **BFR website**: http://aazkbfr.org (please note: both the email & website have **changed** since last year).

Please send checks made out to: AAZK,Inc-BFR & Financial form (on website) & only top money raiser sponsor sheets to: Patty Pearthree, c/o BFR, 318 Montibello Dr., Cary, NC 27513.

Remember there are now **four top money raiser prizes for BFR:** Two for two weeks at Lewa/ Kenya and two for two weeks in Indonesia. Winners must be AAZK members in good standing and must raise at least $1,000 to be eligible and **money must be in by the September 1st Deadline.**

If you are not able to win the prize, but are still interested in visiting Lewa Wildlife Conservancy in Kenya at reduced rates (1/2 price accommodations), contact me and I will put you in touch with one of several people leading trips (including myself) at various times of the year. - *Patty Pearthree*

Chapter News Notes

AAZK, Inc. is pleased to welcome a new Chapter to the Association. **The National Capital AAZK Chapter** is located at Smithsonian's National Zoological Park, 3001 Connecticut Ave. NW, Washington, DC 20008-2598. Officers for this new AAZK Chapter are:

President.....Margaret Kelty
Vice Prsident.....Dan Boritt
Secretary.....Erin Stromberg
Treasurer.....Denny Vogt
Chapter Liaison.....Angela Marlow

We wish them every success in their conservation and continuing education efforts.

Little Rock Chapter Offers Final Sale on T-shirts/Sweatshirts

The Little Rock AAZK Chapter is offering for sale their remaining inventory of T-shirts and Sweatshirts featuring the old AAZK Rhino Logo. These are sure to become collector's items so if you are interested you are urged to email your request immediately as quantities and sizes are limited.

Colors and sizes of available inventory are shown below. Email Charity Dawson (pachydermluvr@yahoo.com) with your request. She will advise you of its availability and process for ordering and payment. These shirts will be sold on a first come-first served basis.

Sweatshirts - $10.00

Grey 8-XXL and 6-M
Navy 5-XXL and 6-M
Khaki 8-XXL, 7-XL, 1-L, and 6-M
Green 8-XXL, 3-L, and 5-M

T-Shirts - $ 5.00

Maroon 8-XXL, 4-L, and 3-M
Navy 9-XXL, 1-XL, 2-L, and 6-M
Khaki 6-XXL, 2-XL, 2-L, 7-M, and 2-S
Green 6-XXL, 2-XL, 2-L, and 10-M

PUGET SOUND AAZK Seattle, Washington

Puget Sound AAZK Chapter, Seattle, WA

In December our Chapter raised over $15,000 at our Holiday Auction and Bake Sale. The proceeds will be used for local and global conservation and research projects, the advancement of the zookeeping profession and disaster relief for keepers.

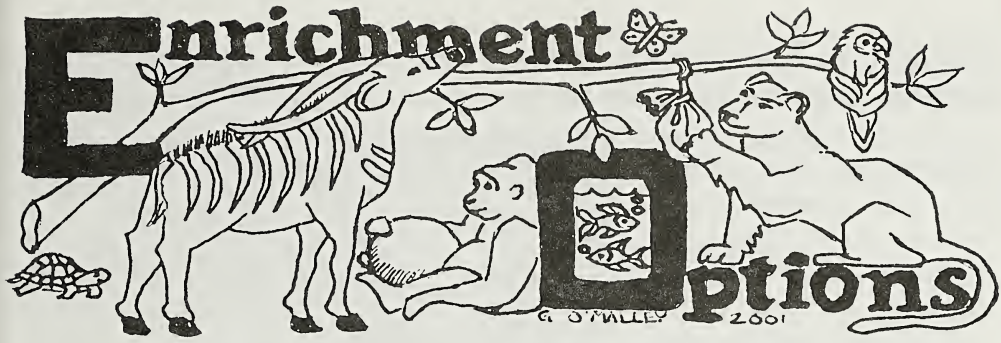
In April we are held our 2nd Annual Earth Day Book and Bake Sale at which we raised over $1800. The money will go towards keeper development and the sponsorship of a foreign keeper at the ICZ conference.

Over the past five years our Chapter has raised over $68,556 for Bowling for Rhinos. We have set our Bowling For Rhino date for Saturday, 29 July. We are looking forward to an exciting evening. We are also updating our website at www.pugetsoundaazk.org< So stay tuned for news of our latest and greatest undertakings yet to come!

Our officers for 2006 are:

President .....Carolyn Austin
Vice President.....Jean Ragland
Secretary .....Pat Owens
Treasurer .... Roz Sealy
Liaison .... Peter McLane

--PeterMcLane, Liaison



EO Editors - Dawn Neptune, Utah's Hogle Zoo
and Rachel Daneault, Disney's Animal Kingdom

Chimp Haven's Integrated Enrichment Program

By Lori D. Panu, Enrichment Technician
Chimp Haven, Inc., Keithville, LA

Chimp Haven, Inc is a non-profit chimpanzee sanctuary in Northwest Louisiana. From the very beginning, this organization relied on the collaborative efforts of many diverse organizations and individuals for its inception. This has produced a world-class facility with the main goal of offering a naturalistic and enriching environment for captive chimpanzees. Following this philosophy of cooperation for a common goal, the design of the enrichment program is an integration of several departments' input – Behavior, Husbandry, Veterinary, and Maintenance. In fact, the implementation of the program relies on each of these departments.

Gay, Derma, and Jimoh with PVC Treat Tubes and Raisin Boards

At the beginning of the program, a list of enrichment ideas was collected from staff experience, Internet sources, and literature searches. This compilation was reviewed by the Veterinary and Behavior Departments for safety and potential efficacy through promoting species-typical behavior. The program is constantly being expanded with the addition of newly approved items and ideas. All staff members, including administrative personnel, are encouraged to submit new ideas for review.

The Enrichment Technician creates a monthly calendar that incorporates approved items from the different enrichment categories. The technician is responsible for maintaining a stocked enrichment kitchen and storage rooms, delegating duties for preparation and implementation of the calendar, and reviewing the enrichment logs. The animal care staff members report on the efficacy of daily enrichment through DVMax, an animal records database. There is a numerically-based rating system to indicate a chimpanzee's reaction or interaction with enrichment, as well as the opportunity to log observational notes.

Daily implementation of enrichment items is accomplished mostly by the caregivers. Their days are organized such that enrichment is an integrative part of the husbandry routine. Even safe

contraspecific interaction is a planned calendar item to increase human-chimpanzee affiliative relationships, though caregivers are also encouraged to engage in unplanned interaction.

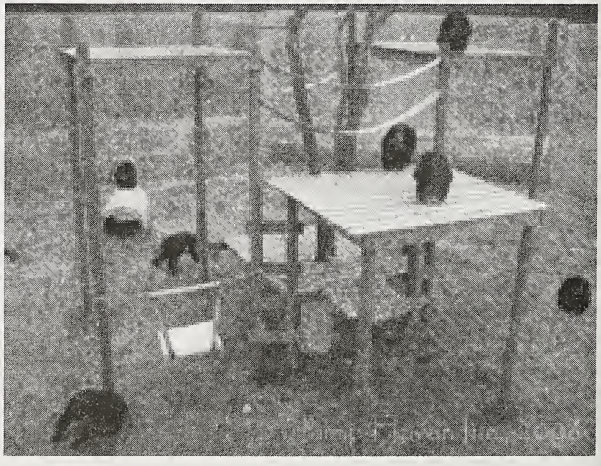
Enrichment preparation requires the efforts of the nighttime caregiving staff and weekly volunteers. Along with the daily calendar items, various food enrichment items are kept stocked everyday, like raisin boards, apesicles, stuffed Kong® toys, and paper roll treats. During Chimp Haven public open houses, visitors have the opportunity to create some of these treats as well. These activities are quite engaging for children and adults alike, while the large production of enrichment benefits the chimpanzees.

L-R, Erin Loeser (caregiver), Alisha Staggs (caregiver), Christine Sumner (caregiver), and Martha Lennard (volunteer) prepare enrichment for the chimpanzees

Grandpa with Stuffed Kong® Forager

The Behavior and Maintenance Departments work closely to plan and construct the permanent physical enrichment of each chimpanzee area such as the bedboards, hammocks, climbing structures, platforms, swings, etc. There is also collaboration on foraging device designs and modifications.

Even the positive reinforcement training program is a cooperative effort of personnel. While the Behavior Department oversees the program design and staff training, the caregivers are the primary trainers for the chimpanzees. The veterinary staff trains specific medical protocols and the behavior staff works on behavior modification protocols as needed.



The chimpanzees's play yard includes platforms, climbing structures, ropes for swinging, a hammock for nap time and other enriching elements.

Puddin' with Stuffed Kong® Bones

Chimp Haven strives to combine the unique talents and experiences of its staff members to create a model care facility for chimpanzees. The chimpanzees coming to Louisiana have benefitted from this integrative approach to enrichment.

Visit the Chimp Haven website at:
http://www.chimphaven.org

(Ideas appearing in this column have not necessarily been tested by the editors for safety considerations. Always think ahead and use good judgement when trying new ideas. You are invited to submit material for the Enrichment Options Column. Look in the January 2004 issue of AKF for guidelines for articles acceptable for this column's format or contact the editor at akfeditor@zk.kscoxmail.com for a copy of the guidelines. Drawings and photos of enrichment are encouraged. Send to: AKF/Enrichment, 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054, USA. Eds.)

Lee Houts Enrichment Excellence Award- Let Someone Shine!

Have you been impressed with an initiative that an individual or group has developed to better enrich their animals? Has an individual or group **you** know, developed an activity for a species in their care that has brought forth breathtaking natural behavior? Do you know an individual or group that has spearheaded a dynamic program helping their department move forward with sustainable, accountable, zoo-wide enrichment? Has this individual or group inspired you through their dedication to enrichment for captive wildlife? If so, you can let them and their colleagues know just how much their hard work is appreciated through the Lee Houts Enrichment Excellence Award. Official forms for nomination will be in a coming issue of the *AKF*, but start thinking now of that special person or group who you think may be an Enrichment Hero! Award recipients and their work will be highlighted in an issue of the *AKF*.

Call for Submissions for Enrichment Options Column

Enrichment Options readers - WE NEED YOU!! We are looking for any and all articles that discuss enrichment processes and philosophies as well as device articles. We are, however, looking for device articles to discuss not only the construction of the device but also the goals, behaviors to be encouraged, process of documentation and findings upon evaluation. We also want to know about the programs, processes and philosophies at your institution and how they work for you.

But here comes the critical piece to this equation. We need you, our readers, because you are our most important contributors. We need you to submit articles for publication because the column simply cannot exist without you. We want to share information with institutions all over the world, but we can't do it without your submissions. We want to hear about how the enrichment process works for your facility. We want to know about specific enrichment devices that are working for your animals. We want to hear your creative perspectives on all things enrichment!

Submissions may be sent in hard copy (also include a disk or CD) to: Enrichment Options, AAZK, Inc., 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054. Or you may submit material electronically to akfeditor@zk.kscoxmail.com. Please send photos, graphs or charts as separate jpg ot tif files. Make sure to provide captions and photo credits. Manuscripts should be sent in MS Word format only. Please provide your contact information, including email and daytime phone number.

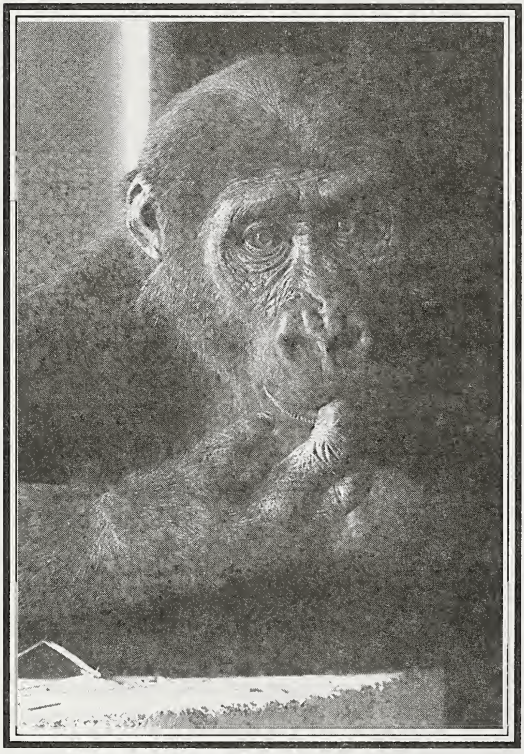
We hope to hear from YOU soon! Thank you in advance for your contributions! - *Enrichment Options* Co-editors Rachel Daneault, Disney's Animal Kingdom and Dawn Neptune, Utah's Hogle Zoo.

ROLLIE AND MUMBALI'S JOURNEY

By Jill Moyse, Keeper
The Regenstein Center for African Apes
Lincoln Park Zoo, Chicago, IL

The Regenstein Center for African Apes (RCAA) at Lincoln Park Zoo opened its state of the art facility in July of 2004. The apes arrived back to a brand new building with much larger enclosures and yards with much more flexibility for animals and keepers. It currently houses two gorilla groups (4.8) and two chimpanzee groups (4.8). In the spring of 2005, RCAA staff mourned the loss of one of our gorillas while celebrating the recovery of another. This experience affected us all deeply. We wanted to share that experience with our colleagues, both as a means of helping us cope with these events, and as a testament to our many friends and colleagues who helped us through this challenging time. The experience of how other institutions can come together in a time of need, of medical doctors who donate their time and resources, and even one of our own silverbacks becoming a blood donor to help two sick gorillas is, in many ways, an uplifting one.

Rollie (age 9 yr) and Mumbali (age 7 yr) were full sisters born at Lincoln Park Zoo to female Kowali (Lincoln Park Zoo) and male Gino (currently at Disney's Animal Kingdom). Both sisters were pulled from their mother for medical reasons and raised for a brief time at Lincoln Park Zoo's nursery. Once stable, they were raised by an unrelated surrogate mother, Debbie, and integrated into a stable family group led by silverback Frank along with Debbie. While RCAA was under construction, this group was housed at the Louisville Zoo. Rollie and Mumbali remained with Frank's group until they were transported back to Lincoln Park Zoo in June of 2004. Frank would remain at Louisville and be housed in a bachelor group so the plans were always for Rollie and Mumbali to return to Lincoln Park Zoo.



Mubali

At RCAA, they were housed in holdings next to JoJo's group (the group to which they were to be introduced) which consisted of 2.3 gorillas and were introduced two days later. They both integrated well into JoJo's group as they had previously lived with all of the females in the group at various times. Both had frequent interactions involving the two infants in the group, Azizi and Susie, and Mumbali was a favorite of the silverback, JoJo. Rollie and Mumbali were very active young gorillas. They spent lots of time playing with each other, members of their group and staff. They both eagerly participated in daily training sessions and ongoing cognitive research. They were extremely close and were never far from each other.

In early April, Rollie suddenly became lethargic. Rollie was very food-motivated, but during this time she began to refuse fruit, would hardly forage, and was seen sleeping all day. She was started on antibiotics, and two days after her first clinical signs she was immobilized for a physical exam. Nothing conclusive was found upon physical exam, which included blood work, radiographs and ultrasound, so she continued antibiotics while separated from the group. Nine days after Rollie first became ill;

Mumbali began to show similar signs (lethargy, diarrhea, no appetite). Both were separated together from the group in holding. Both were immobilized for physical exams and intravenous fluid support. Rollie was consistently more compliant with all her medications while Mumbali often refused her antibiotics. Although both gorillas had episodes of slight improvement, recovery was not apparent. It was even more difficult since we did not know the cause of their sickness. Then Mumbali's condition suddenly deteriorated. Two days after their exams, Mumbali had copious amounts of bloody diarrhea, collapsed, and underwent an emergency sedation for physical exam. We called upon members of the zoo's Medical Advisory Committee for assistance. Dr. Marc Feldstein (Ob-Gyn) and Dr. Mike Podell, (veterinary neurologist) were available to assist. At this time, Rollie was separated from her sister. Nothing conclusive was found on physical exam, so we initiated a 24-hour watch on Mumbali to monitor IV support, provide medications, and monitor urine output. Thirty six hours later, Mumbali was again sedated and taken to Dr. Podell's clinic for CT scans of the torso and head. Although we had no explanation, it was clear that her kidney function was compromised. Her bloodwork showed that she was becoming dangerously anemic due to the continued bloody diarrhea and our options for treatment were becoming limited.

At this point we determined that our best option was to try hemodialysis simultaneously with a blood transfusion. Hemodialysis, often just called dialysis, is the process of circulating the blood externally through a machine that cleans out waste products, thus taking over for kidneys that are non-functional. A transfusion alone would not help with kidney failure, and dialysis without a transfusion would be risky. Louisville Zoo had used a dialysis machine on another gorilla (Debbie). They were contacted and immediately responded with help. Louisville Zoo immediately contacted their specialists who inspected the dialysis machine and made certain it was ready for use. Roby Elsner (Gorilla Supervisor) and Steve Wing (General Curator) drove the dialysis machine for five hours to the Indianapolis Zoo Veterinary Hospital, our "transfer" point, where Indianapolis staff members were waiting by to help load the machine. Lincoln Park Zoo staff, Rick and Lizette Bohn, drove for four hours to the meeting point loaded the machine and headed back to Lincoln Park Zoo.

Rollie

In general, the best blood donor is a closely related animal. Unfortunately, Mumbali's relatives at Lincoln Park Zoo were either pregnant (Kowali), nursing (Bahati), ill (Rollie), or too young. In this case, the next best alternative was an entirely unrelated male so Kwan, a 16-year-old silverback was selected as the blood donor. We did not know if Kwan and Mumbali would have the same blood type, but testing was scheduled to occur before the transfusion. The staff prepared for this double procedure the following morning: immobilizing Kwan for a transfusion and conducting a lengthy hemodialysis procedure on Mumbali. Kwan was immobilized and found to be a match. He donated two pints of blood to Mumbali who was sedated for the blood transfusion and dialysis. These procedures were performed by Dr. Wallid Ghantous and a team of technicians who spent ten hours with the RCAA staff and animals to oversee this complex process. The blood transfusion and dialysis went smoothly and Mumbali's color markedly improved. We would have to wait until the next day to see if her improvement would hold. Over the days of Mumbali's intensive care, Rollie had continued to improve. She had begun eating, drinking, and soliciting attention from keepers, something that we had not seen in weeks. We rejoiced and hoped that this signaled a turn-around for both our gorillas.

Unfortunately, Mumbali's improvement was short-lived. Although the dialysis provided some short-term relief, she began to hemorrhage again overnight. The following day, the exhausted and emotionally drained staff faced a very agonizing decision.

It is always a very painful decision to euthanize an animal, but Mumbali was a young female with no prior health problems making this an even more difficult decision. But during those last days, it became clear to all of us that the qualities that made Mumbali the unique individual we all loved were no longer there. To think of Rollie without her sister and the group without Mumbali was almost too much to bear. But looking at her, we knew euthanasia was the right decision to make; in many ways Mumbali had already left us. It was also very confusing for me personally. Just weeks before when Rollie had gotten sick, I had taken Mumbali outside to give her some juice and she was running around, banging on the glass, beating her chest and even pulling a whole tree out of the ground. It was very hard to understand what had happened to this once vibrant gorilla, but the keepers, staff, veterinarians, veterinary technicians and medical doctors had done everything to save her. As much as you wanted to be with her, comfort her and do everything to help her, it was very painful to watch her decline. Mumbali was euthanized with Rollie in an adjacent holding area. Rollie intently observed the procedure and we laid Mumbali's body out in front of the holding for Rollie to see. Since we still did not know the cause of the illness, we could not allow Rollie to touch the body nor let the rest of her group come down and view her.

Pushing past our grieving for Mumbali, the staff put all of our energy into saving Rollie. She had begun to show improvements with an increased appetite, soliciting attention and increased energy. Since Rollie was still separated from her group and no longer had her sister, we wanted to make sure she improved physically and mentally. We gave her extra toys to play with and videos to watch when we could not be present. She was very interested in the Disney animated film *Finding Nemo*, so we brought her two live fish, appropriately named Gil and Fin, to keep her company. Staff sat with her to watch movies and just spend time with her. She seemed to appreciate the extra attention being provided and would vocalize loudly when we left. As she continued to improve, we began to shift the group back into holding with a buffer between them. The group had access to the holding area overnight to keep Rollie company although direct contact was still not permitted. Rollie also started to participate in training sessions again. She was sedated for a final physical exam 28 days after she first became ill, and after 44 days of being separated she was re-introduced without incident back to JoJo's group. Today she remains a very healthy, active gorilla who once again has a non-stop appetite, regaining all her lost weight plus a few extra pounds, now weighing 65.6kg (144lbs). Most days she is seen eating or playing with Azizi. She is very motivated in training and has shown great promise during cognitive research sessions in which she's become very good at operating a touch screen computer to receive small food rewards. She also has been "fishing" for ketchup at the artificial termite mound.

We still do not know the cause of Rollie and Mumbali's sickness. It was first suspected to be leptospirosis, a bacterial disease that primarily affects the kidney and liver, but that gradually was replaced by a likelihood of a viral disease. The loss of Mumbali has been extremely difficult, but I am hoping that something good can come out of it. Not only did the staff at Lincoln Park Zoo display tremendous dedication and effort throughout this experience, but our colleagues at other zoos and in the medical community provided invaluable aid when we needed it. The staff at the Louisville Zoo readied the dialysis machine and drove half way to Chicago with it. Indianapolis Zoo served as our "transfer" point. The medical professionals who assisted throughout Mumbali's treatment gave their time willingly, spending many hours with us, coming in whenever they were called.

What have we learned from this? We would like to recommend that when routine physicals are performed, a blood type test be performed so that we can start a blood typing list for potential donors to improve success in transfusions across institutions. The author will be working with Lincoln Park Zoo veterinarians on blood typing protocol recommendations that all institutions can utilize. We currently house the dialysis machine and hopefully it will not be needed anytime soon, but if so we will gladly help anyone in obtaining it. We are so grateful to all of the medical doctors and volunteers who donated their time and resources and who treated Rollie and Mumbali like one of their own patients. Not a day goes by that Mumbali is not mentioned in some funny story and she is greatly missed by humans and gorillas alike.

(Photos courtesy of Lincoln Park Zoo)

Training 3.0 Dwarf Mongooses at the Newark Museum Mini Zoo

By
Holly Griffiths, Keeper and
Kristen Schmid, Senior Keeper
Newark Museum Mini Zoo, Newark, NJ

The training program currently in practice for our 3.0 dwarf mongooses (*Helogale parvula*) has undergone many revisions since its beginning in June of 2003. As we learned more about the behavior of our mongooses and the practice of training itself, it became necessary to modify our goals and procedures. Initially, we attempted to assign names to each animal, with the intent of being able to summon one individual mongoose at a time either into the exhibit or into the shift. Each animal was assigned a different shaped and colored bowl, placed in each animal's favorite spot in the exhibit and shift. Their reward for coming to the bowl when called was a cricket tossed into their bowl. This method was used because hand-delivering the cricket to the correct animal was not possible due to bite risks, and any crickets tossed onto the sand were eaten by the quickest and most dominant animal, instead of the one that performed the behavior correctly.

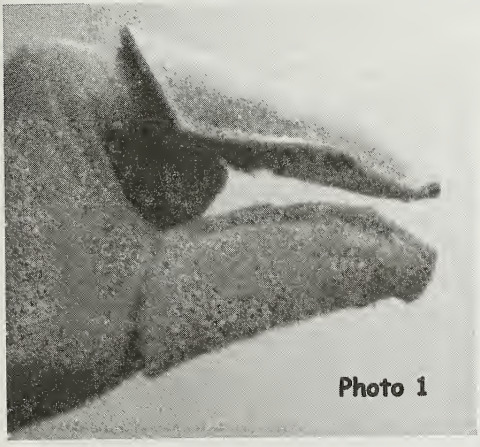


Photo 1

As we progressed, we found that due to the social structure of the dwarf mongoose, they are most comfortable when together and nearly impossible to separate. Each time an animal was called, it was likely that all three would respond. Also, the dominant animal usually became aggressive and chased the others when they received a reward. This particular problem was solved when we began using finger cots in 2004, elastic leather fingertips placed over the thumb and forefinger of the keeper's hand (see photo #1). Their thickness makes the cots bite and puncture proof, and we are able to deliver the cricket directly to the mouth of the mongoose with no injury. Due to the small size of the exhibit, it was impossible to use one trainer for each animal, a common practice in group training.

While we initially began training as a way to move them back and forth between the exhibit and shift for cleaning, this would not have been successful because each day someone different cleans the exhibit, and training was not likely to work if many keepers were involved. Instead, we now place half their diet in the exhibit to attract them, then close the connecting door and clean the shift. The second half of the diet is then placed in the shift, and the exhibit is cleaned when they come into the shift to eat. Close observations of their aggression patterns led

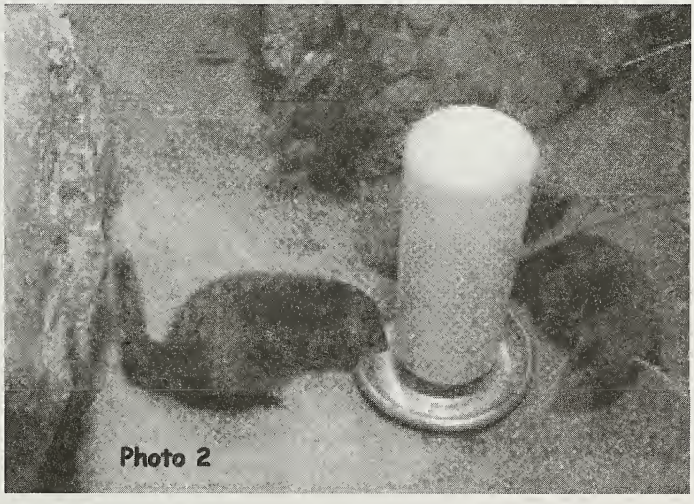


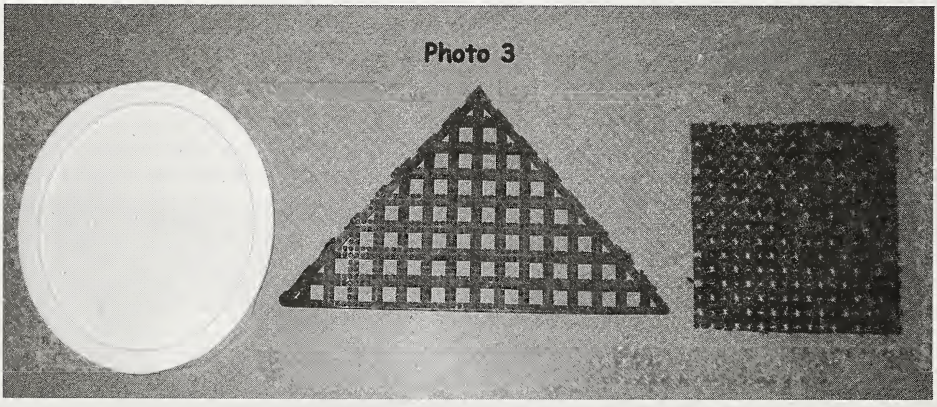
Photo 2

us to adopt the use of poultry feed dispensers with steel bases for live bug feeding (see photo #2). The holes are small enough to allow only a few mealworms at a time to crawl out, and each animal is usually busy with his own dispenser, cutting down on aggression and adding daily enrichment at the same time.

We also began to question their ability to respond to speech patterns of the human voice. We were unable to find any publications on successful training with mongoose and informally consulted a number of professionals to ask for advice. Eventually we decided to replace their individual names with whistle blasts, in case the names we had chosen for them were too similar for them to distinguish. This was short-lived however, because it became impossible to carry all the items we were using for a training session. In addition, it was impossible to assign each mongoose to a specific whistle blast without separating them to ensure that each one would learn their signature whistle.

Instead, we decided to abandon the hope of calling them into the exhibit or shift individually and revised our goal. Holly Griffiths became the mongooses' primary trainer. This time, knowing that they would all approach the keeper at the exhibit door, we planned to assign each animal a separate station that they would target by standing on. Our goal in training this behavior was to eventually be able to move the mats onto a scale or into a trap or crate. This method would also cut down on aggression and occupy all three mongooses at once, because they would all be asked to target simultaneously. We also removed any voice commands, in case they were unable to discriminate between them.

In June of 2004, individual mats of different color, texture, and shape were created that would lie flat on the floor of the exhibit (see photo #3). No animal showed any attraction for a particular design, so they were randomly assigned to each mongoose. Mongoose #1 was assigned a triangle made of black Dridek® material (a popular porous floor mat). Mongoose #2 was given a green square made of "welcome mat" fake grass, and Mongoose #3 was provided with a smooth white plastic lid from a bucket. Each mat is smaller than six inches (15.24cm) across, but able to accommodate the body of a mongoose.



It was noticed that the mongooses preferred certain areas of the exhibit in the presence of a keeper at the exhibit door, so this is where we asked the mongooses to target by standing on their assigned mat. They were placed far enough apart so the mongooses would not be forced to cross each other's paths which could result in aggression.

The beginning of a training session was cued by the sound of the exhibit door opening, followed by the mats being placed down. The mongooses had 30 seconds to target the mats. This behavior was initially shaped by luring the mongooses with a cricket to their correct spot and then bridging with a clicker when they touched the station with any part of their body. Thirty seconds after the start of

the session, the mats were picked up and then placed back down to announce the start of round two. The sessions were kept to a maximum of two trials to accommodate the mongooses' attention span of approximately five minutes.

An evaluation was done two months later after the first 20 training sessions, or 40 trials. Mongoose #2 and #3 responded correctly the highest percentage of times. Mongoose #1, also our least dominant animal, responded correctly only about 50% of the time, probably due to intimidation by the presence of the other mongooses. Another evaluation done in approximately three months showed that all three mongooses improved dramatically. Mongoose #1 went from a 50% to an 85% success rate.

Currently, we have been able to move their stations about one foot each (30.5cm). We suspect that the spatial position of the mats may be related to their success. The least dominant animal may only be confident performing a behavior while the dominant animal is in his line of sight.

Future goals include the movement of the targets around the exhibit and incrementally into traps or crates. Our experiences so far have formed a great foundation for a successful group training program

Acknowledgements
Thanks to Emily from Natural Encounters, Tammy Schmidt from the St. Louis Zoo, Stephanie Ellis and Chris Waldron from the Philadelphia Zoo, Lisa Takaki from the Shedd Aquarium, Autumn Nelson from Racine Zoo, and Paul from the New York Aquarium for their ideas and discussions.

Keeper's Alert - Assistance Sought

Trouble with mallards, pigeons, chipmunks or squirrels? Are abundant native species mooching meals?

Many of us experience the same problems. Native critters that find a free and easy meal while our collection animals are battling for their dinner. Maybe you have trouble with raccoons but have come up with a great feeder to keep mallards out of your flamingo's feed.

I am putting together a resource guide for exclusionary feeders for any species. If you have a feeder no matter how simple or complex, I would like to add your feeder to the guide. Please send photos, diagrams and descriptions or questions to Shilohwalkosak@aol.com

All submissions will be included and everyone who submits a feeder will receive a copy of the finished guide!

Someone out there might even know how to keep raccoons out! (but I doubt it)!

--Shiloh Walkosak, Reid Park Zoo, Tucson, AZ

Quest Chests:
Educational Activity Boxes

By Melba Brown, Keeper
Small Mammal House
National Zoological Park, Washington, DC

North American zoos often top the list of places to visit by children and adults alike. Many zoos are living museums that share the important task of educating a broad range of visitors about wildlife and a plethora of animal-related topics including ethology, ecology, captive enrichment, reproductive science and ultimately, conservation.

Currently, there are a number of effective educational venues that exist throughout zoos to teach people about the natural world including signage, public talks, animal demonstrations, films and published text. One dynamic way to reach and teach culturally diverse and multi-generational zoo-goers is through the use of interactive Quest Chests that include Braille for visually-impaired and blind visitors. The Smithsonian Institution utilizes this box format as one exploration tool that allows visitors to discover interesting and little-known facts about animals in the collection and beyond.

The Quest Chests are durable, wooden boxes that resemble tea caddies but are larger in size. They are portable and they effectively present different animal themes to individuals or groups. The kits can be used as a self-directed activity or leader-led group activity. This paper highlights six educational Quest Chests that I developed to use as a fun and challenging resource for visitors to experience at the Smithsonian's National Zoological Park. The six featured themes are relevant to the Small Mammal House collection which includes primates, rodents, carnivores, reptiles and birds. The boxed topics are *Body Coverings*, *Nesting and Substrate Materials*, *Wild Prints*, *Enrichment Herbs*, *Feeding Frenzy* and *Wild Scents*.

Quest Chests are an adaptation of Discovery Boxes that are used in a Smithsonian museum setting. The first generation Discovery Boxes contain items to inspect and explore. The themes run the gamut from types of granite to international dolls. They are fun, attractive, easy to use and memorable. Quest Chests differ from the traditional Discovery Boxes by presenting a series of challenges that the "explorer" has to think through in order to correctly solve the challenge. Each box has a large selection of interesting objects to explore. (See photo 1) The senses are fully engaged as there are a variety of objects to see, touch and smell. Each box is equipped with a magnifying glass for closer inspection, books relevant to the topic, and big, vibrant pictures. There are instructional "READ ME" laminated signs detailing each quest. Answer sheets are included for immediate visitor satisfaction. The box dimensions are 12 1/2"W x 19"L x 5 1/2 "H (approximately 32cm x 48cm x 14cm.) The inside is lined with red velvet and there are two removable wooden partitions to accommodate the different-sized objects. Two handles make for easy portability. The chests were custom-made by a woodcrafter and constructed deeper than the usual tea caddies. Each box cost approximately $120.00; however, other less expensive containers would work just as well. Actual tea caddies could be used for the same purpose depending on the theme and size of selected objects. Plastic containers or simple shoe boxes could be recycled and revamped for use as educational kits.

Body Coverings focuses on the different forms of external layers including hair, feather, fur, spines and scales. The quest is to view a set of body covering samples that are neatly displayed in plastic

containers and correctly identify which animal each is from. The samples include a chinchilla pelt, tenrec spines, iguana shed, bird feathers and sloth hair. There are a set of colorful photographs that show the animals up-close so that the participant can study them. To increase the challenge, the number of pictures exceeds the number of body covering samples. Also, there is a book in the box that features additional body coverings for further exploration. The visitors are allowed to remove the samples and touch them. Oftentimes, these boxes are explored in front of an animal's exhibit so the visitor has an immediate educational encounter with an actual body part of an animal that is visible at close-range. Visually-impaired and blind visitors experience profound encounters when they come it contact with Quest Chests. The boxes greatly enhance their zoo experience and make it more personal.

Nesting and Substrate Materials-features numbered plastic containers with soil, sand, hardwood pine bark mulch, shavings, Spanish moss and Timothy hay. This chest also has cork bark, actual nests, and burlap with accompanying signs explaining what they are. The quest is to identify the substrate and guess which type of animal utilizes it. The pictures feature animals mingling with the various substrates. The accompanying pop-up book features constructed animal homes.

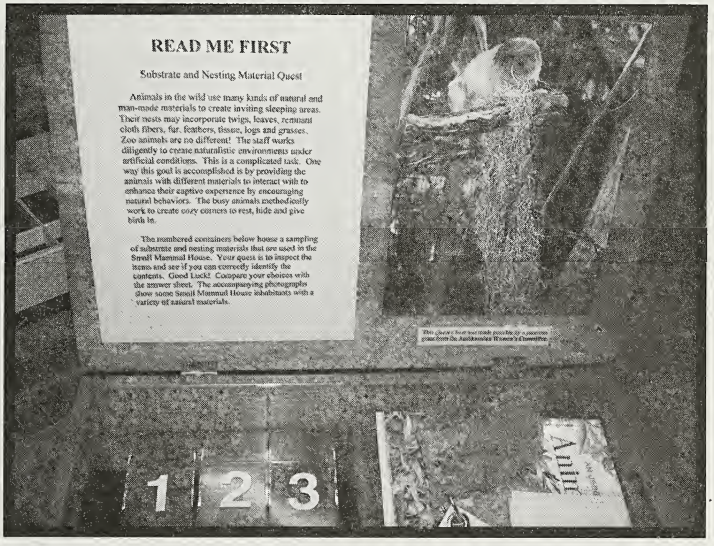


Photo 1: Quest Chest with instructional text, pictures, objects and books

Wild Prints (See photo 2) - takes on a fun 'whodunit' twist by using animal prints and other clues to solve a stolen grape mystery. A computer-generated wanted poster describes the crime scene and the explorer assumes the role of detective to correctly identify the criminal. There are casts of animal prints, containers with evidence, a crime scene photograph, pictures of the suspects, three-dimensional animal prints and the confidential envelope with a humorous picture of the 'criminal' caught in the act. There are three books on animal tracks. This box is very popular with children.

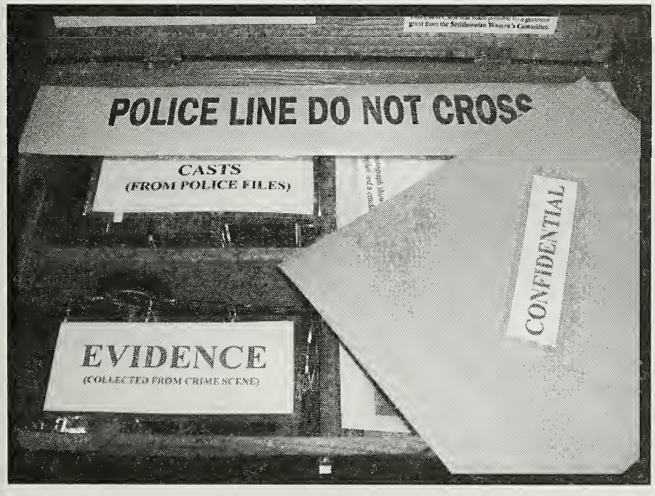


Photo 2:
An animal 'whodunit' Quest Chest

Enrichment Herbs features the delightful quest of using vision and olfaction to identify aromatic herbs. There are eight containers that have dried rosemary (*Rosemarinus officinalis)*, lavender (*Lavandula aufustifolia)*, mint (*Mentha sp.)*, fennel (*Foenculum sp.*), lemon balm (*Melissa officinalis)*, oregano (*Oreganum vulgare)*, chives *(Allium schoenoprasum)* and thyme (*Thymus vulgaris.)* These garden herbs are used as forms of enrichment for animals in the collection. They are collected from the zoo's lush herb garden and a number of the animals enjoy the complex scents and savory flavors. The chest shows photographs of the animals (lemur, otters, tree shrew, coati and saki monkey) interacting with their 'green' enrichment. (See photo 3) There is also a container of garlic. The garlic is used to help ward off biting insects during the summertime. A special feature of this box is a compact herbarium of pressed herbs that have retained their natural form and color. The chest contains a generalized book on herbs.

Feeding Frenzy is an enjoyable match game involving animal diets. There are containers with six samples of food the animals eat including pellets, artificial fish and mice (for obvious reasons), canine chow and specialized foods. The photographs offer a selection of animals to choose from plus clues. The quest is to match the diet with the correct consumer. A photo gallery shows other images relating to captive animal nutrition including the commissary, animal food pans, chicks, mealworms, crickets and crayfish. The book in this kit discusses forms of teeth.

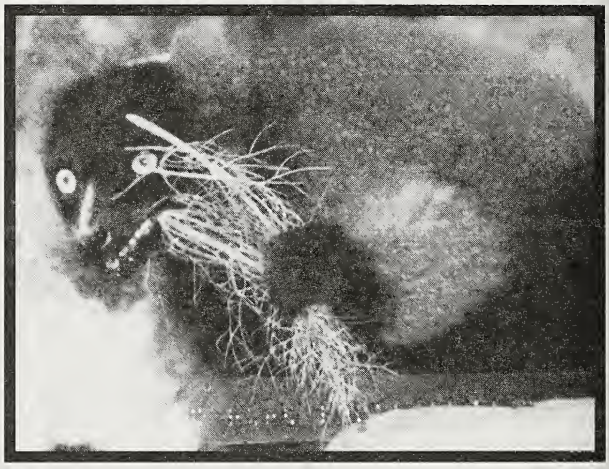


Photo 3: Red-ruffed lemur, *Varecia variegata rubra,* eating fennel (Braille on lower part of picture)

Wild Scents challenges the nose! The topic is olfactory communication. This box features containers with actual scents collected from otters, marmosets, a leopard cat, a cusimanse and humans. The animal scents are gathered from known scent-marked areas in enclosures. These potent aromas are then transferred and maintained in dark-plastic containers with cotton balls. The aroma is fixed with the dried herb orris root (*Iris germanica*). The challenge is to look at a group of pictures and match each one with the correct scent. There are also containers with roses, chocolate and cinnamon to cleanse and soothe the nasal passages! A sample of musk cologne is included with text describing the use of animal scents in products and the issue of animal exploitation and conservation. The books discuss olfaction and communication. This box, in particular, always leaves the visitors howling with laughter and appreciating the power of scents.

In summary, Quest Chests are effective educational tools that make a lasting impression on zoo visitors. They are informative, challenging and entertaining. Finally, I would like to challenge you to see how you can use this engaging format to reach and teach your audiences. It is guaranteed to be successful!

Photos provided by the author

Institutions wishing to advertise employment opportunities are asked to send pertinent data by the ***10th of each month*** *to: Opportunity Knocks/AKF, 3601 SW 29th St., Suite 133, Topeka, KS 66614-2054. Please include closing date for positions available, and when setting these dates keep in mind that because of bulk-mail, most readers do not receive their AKF until the middle of the month or later. There is no charge for this service and fax or e-mail listings of positions which become available close to deadline are accepted. Our Fax is (785) 273-1980; e-mail: akfeditor@zk.kscoxmail.com< Listing must be sent as MS Word attachment. To post a position on the AAZK website, employers may go directly to www.aazk.org, go to Job Listings, register your facility, and then you can post your own jobs. Listings are subject to web administrator approval before they go "live".*

Senior Zookeeper (Amphibians, Reptiles, and Fishes) - Sedgwick County Zoo, Wichita, KS
Please mail cover letter and resumé to kgraham@scz.org and apply online at https://www.hrepartners.com/jobs/PositionDetail.cfm?JobNum=7855&PartnerCode=SG&LeoFlag=NThe Sedgwick County Zoo has an open position for a Senior Zookeeper in the Amphibian, Reptile and Fishes department. Both interpersonal skills and animal expertise are sought. The departmental focus is primarily on Amphibians and Reptiles with a diverse collection featuring ca. 200 specimens. Opportunities for participation in AZA courses, studbooks, conservation efforts, etc. are available and encouraged. **Responsibilities:** The selected candidate will report directly to the curator and will supervise, train, evaluate, and assist a staff of three full-time employees, participate in the daily care of collection animals, and oversee departmental volunteer and practicum student activities. **Requirements:** Consideration will be given to candidates with a Bachelor's Degree in Biological Sciences or related field, and a minimum of two (2) years' experience caring for amphibians and reptiles (including venomous specimens) in an AZA-accredited facility. Additional experience with freshwater aquatic systems is a plus. Physical requirements include occasional submersion in an aquatic exhibit (dive certification or willingness to become dive certified is a plus), ability to move 20-pound items on a regular basis and 50-pound items on occasion. Access to some enclosures requires the ability to climb ladders, bend to access top opening enclosures, and work from a platform. **Salary:** Starting wage $14.149 hr - $15.13 hr, depending on experience. We offer an excellent benefits package.

Exotic Animal Care Internship - Peace River Refuge & Ranch Exotic Animal Sanctuary, Zolfo Springs, FL
To apply, contact Brigitte Ivory at volunteer@peaceriverrefuge.org or visit our web site at: WWW.PeaceRiverRefuge.org for more information. Application Deadline: OPEN UNTIL FILLED Our sanctuary provides permanent residence to a variety of exotic animals such as tiger, cougar, leopard, bear, wolf, lynx, and capuchin, spider and tamarin monkeys. Applications for Fall 2006 and Spring 2007 are currently being considered. **Responsibilities:** Responsibilities include, but are not limited to: Prepare primate and bat food, this includes sorting, cleaning and cutting fruits and vegetables according to strict diet requirements, distribute food to all primates, assist in preparing big cat, omnivore and other carnivore diets and food distribution, clean animal habitats, this includes primates, big cats, and any other habitat for animals that reside at the sanctuary, general cleaning and organizing activities involved with feeding and general care for the animals, and assist with habitat building, learning about captive wildlife safety and caging requirements. **Requirements:** Candidates must be enrolled in a college curriculum or have completed at least two (2) years of college in degree program or have graduated with a degree in Biology, Animal Psychology, Zoology or other animal- related studies.

Exotic Animal Horticulture Internship - Peace River Refuge & Ranch Exotic Animal Sanctuary, Zolfo, FL
To apply, contact Brigitte Ivory at volunteer@peaceriverrefuge.org or visit our web site at: WWW.PeaceRiverRefuge.org for more information. Application Deadline: OPEN UNTIL FILLED Peace River Refuge & Ranch Exotic Animal Sanctuary is accredited by the American Sanctuary Association (ASA) and a Member Society of the World Society for the Protection of Animals (WSPA). Our sanctuary provides permanent residence to a variety of exotic animals such as tiger, cougar, leopard, bear, wolf, lynx, and capuchin, spider and tamarin monkeys. Applications for Fall 2006 and Spring 2007 are currently being considered. **Responsibilities:** This internship would involve exposure to garden maintenance, animal enrichment, animal habitat simulation, planning and design, landscape construction, and irrigation installation and repair. The sanctuary has a vast botanical collection and can provide internship projects related to accessing, labeling, and organizing collection

records. Other projects may be available in horticulture education, or landscape architecture. Special projects will be considered upon request if they further the goals of the horticulture section and can be accomplished in the time frame of the internship. **Requirements:** We are looking for undergraduate or graduate-level college students wishing to earn course credits for work related to landscaping of exotic animal habitats and the general sanctuary grounds. This internship is specifically geared towards students studying horticulture, botany, urban forestry, landscape construction and maintenance, or landscape architecture.

Important Announcement: Beginning with the August issue of *Animal Keepers' Forum*, we will no longer be publishing job openings in this journal. We hope this will allow us more room to include articles on animal husbandry, enrichment, training, etc. to assist our members with continuing to broaden their knowledge base. All keeper and internship positions will be posted on the AAZK website (www.aazk.org). At press time there were 45 such positions posted. We encourage you to go the the AAZK website, select Job Listings from the menu bar on the left side of the homepage, and take a look at the many opportunitioes available for those seeking employment within the zoo field.

More Zoo vacancies can be seen by visiting:

American Zoo and Aquarium Association - Job Listings
http://www.aza.org/JobListings/

American Association of Zoo Keepers – Jobs
http://www.aazk.org/animalKeepersForum/opportunity_knocks.php

European Association of Zoos and Aquaria – News then Vacancies
http://www.eaza.net

Australasian Society of Zoo Keeping (ASZK)
http://www.aszk.org.au/Zoo%20Positions%20Vacant.htm

Zoo Vets, Technicians and interns
http://www.aazv.org/job_openings.htm

Bird Jobs in the Field
http://www.birdingonthe.net/mailinglists/BJOB.html

ATTENTION

THOSE INSTITUTIONS WISHING TO POST JOB OPENINGS ON THE AAZK WEBSITE

Institutions wishing to post job openings on the AAZK website (www.aazk.org) can now register online and be able to post your own listings rather than having to submit them to AAZK. From the Home Page go to Job Listings and follow the directions for registering your facility. All jobs must be approved by an AAZK Web Administrator before they will be allowed to go "live". AAZK reserves the right to refuse posting for jobs which we do not feel are appropriate or that may be in conflict with our purposes and mission statement. You need to follow the format protocol set up on the site when listing your job information. You are encouraged to list a closing date for applying for your job postings. If you do not include a closing date for applications, the listing will remain on the site for 60 days and then will automatically be dropped off the Job Listings.

At this time there is no charge for posting a job opening on the AAZK website.

AAZK Membership Application *(Please Print)*

check here if renewal [ ]

Name _____

Email _____

Mailing Address _____

City _____ **State/Province** _____ **Zip/Postal Code** _____ **Country** _____

U.S. Members

- ☐ **$40.00 Professional** *Full-time Keepers*
- ☐ **$35.00 Affiliate** *Other staff & volunteers*
- ☐ **$35.00 Associate** *Those not connected with an animal facility*
- ☐ **$65.00 or up** - *Individuals* **Contributing/U.S.**
- ☐ **$125.00 or up Institutional/U.S.** *Organizations/Institutions (requires Board approval)*
- ☐ **$125.00 Commercial Members** *(i.e.Animal-related food & supplies)*

Canadian Members

- ☐ **$40.00 Professional** *Full-time Keepers*
- ☐ **$40.00 Affiliate** *Other staff & volunteers*
- ☐ **$40.00 Associate** *Those not connected with an animal facility*
- ☐ **$65.00 or up** - *Individuals* **Contributing/Canada**
- ☐ **$125.00 or up Institutional/Canada** *Organizations/Institutions (requires Board approval)*
- ☐ **Library Only** **$40.00 Library** *Available ONLY to public & university libraries (in U.S.)*

☐ **International Members** **$55.00 International** *All members outside U.S. &Canada regardless of category*

Zoo Affiliation (if any) _____

Zoo Address _____

Title _____

☐ **My check is enclosed (AAZK, Inc.)** ☐ **Please charge my credit card**

MASTERCARD **VISA** **Card #** _____ - _____ - _____ - _____

Name on card _____ **Expiration date** _____

Signature _____

Mail this application to: AAZK Administrative Offices, 3601 S.W. 29th, Suite 133 Topeka, KS 66614-2054. Make checks/money orders payable to AAZK, Inc. Must be in U. S. FUNDS ONLY. Membership includes a subscription to *Animal Keepers' Forum*. The membership card is good for free or discounted admission to many zoos and aquariums in the U.S. and Canada.

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AMERICAN ASSOCIATION of ZOO KEEPERS

3601 S. W. 29th St.
Suite 133
Topeka, KS
66614-2054
U.S.A.

Return Service Requested

"Dedicated to Professional Animal Care"

Non-Profit Organization
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Permit # 646

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